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**ABSTRACT**

This document includes verbatim transcripts and prepared statements from the hearings on sex discrimination and sex stereotyping before the Subcommittee on Elementary, and Vocational Education. The report presents the findings of the Subcommittee on the status of women in vocational education, the enforcement of antidiscrimination legislation, possible research strategies in the area of sex discrimination, and the results of a recently completed civil rights survey. Included in the appendix is a detailed research report entitled "Women in Vocational Education." This report examines the status of women in the world of work, sexism in society and education, staff-related problems for women in education, affirmative action for women in education and employment, and implications for change in vocational/technical education. (SJL)

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# SEX DISCRIMINATION AND SEX STEREOTYPING IN VOCATIONAL EDUCATION

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## HEARINGS BEFORE THE SUBCOMMITTEE ON ELEMENTARY, SECONDARY, AND VOCATIONAL EDUCATION OF THE COMMITTEE ON EDUCATION AND LABOR HOUSE OF REPRESENTATIVES NINETY-FOURTH CONGRESS FIRST SESSION

HEARINGS HELD IN WASHINGTON, D.C.  
MARCH 17 AND APRIL 21, 28, 1975

Printed for the use of the Committee on Education and Labor  
CARL D. PERKINS, *Chairman*

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

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# SEX DISCRIMINATION AND SEX STEREOTYPING IN VOCATIONAL EDUCATION

MONDAY, MARCH 17, 1975

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ELEMENTARY, SECONDARY AND  
VOCATIONAL EDUCATION OF THE COMMITTEE ON  
EDUCATION AND LABOR,  
Washington, D.C.

The subcommittee met at 9:35 a.m., pursuant to call, in room 2175, Rayburn House Office Building, Hon. Carl D. Perkins (chairman of the subcommittee) and Hon. Shirley Chisholm presiding:

Members present: Representatives Perkins, Mink, Meeds, Chisholm, Lehman, Risenhoover, Simon, Miller, Hall, Buchanan, Jeffords and Pressler.

Staff members present: Jack Jennings, (counsel); Richard Mosse, assistant minority counsel; Yvonne Franklin, minority legislative associate.

Chairman PERKINS. The committee will come to order. A quorum is present.

The hearing held today by the Subcommittee on Elementary, Secondary and Vocational Education is on the subject of sex discrimination and sex stereotyping in vocational education.

Undoubtedly, this is a most important hearing, and these hearings have been requested by Mrs. Chisholm, Mrs. Mink, and Mr. Bell.

I am hopeful that we will be able to come forward with the minimums that will eliminate any discrimination.

I notice this morning Mrs. Chisholm has a panel here: Dr. Marilyn Steele, director of Planning and Community Activities, Charles Stewart Mott Foundation, Flint, Mich.; and this is Dr. Joanne Steiger, president, Steiger, Fink & Smith, Inc., McLean, Va.; and Ms. Nancy Perlman, treasurer, Washington Area Chapter, Congress of Labor Union Women.

I think it is fitting and proper. Mrs. Chisholm, that you chair these hearings and that you call these witnesses.

Mrs. CHISHOLM. Thank you very much. We will now commence the hearing at this point. We do have on the panel Dr. Marilyn Steele, the director of Planning and Community Activities, Charles Stewart Mott Foundation, Flint, Mich.; Dr. Joanne Steiger, president of Steiger, Fink & Smith, Inc., McLean, Va.; and Ms. Nancy Perlman, the treasurer of the Washington Area Chapter, Congress of Labor Union Women.

Welcome to these hearings this morning. I will ask Dr. Steele to commence.

STATEMENTS OF MARILYN STEELE, DIRECTOR OF PLANNING AND COMMUNITY ACTIVITIES, CHARLES STEWART MOTT FOUNDATION, FLINT, MICH.; JOANNE STEIGER, PRESIDENT, STEIGER, FINK & SMITH, INC., McLEAN VA.; AND NANCY PERLMAN, ALSO TREASURER, WASHINGTON AREA CHAPTER, CONGRESS OF LABOR UNION WOMEN

Dr. STEELE. Thank you. Thank you so much for the opportunity to appear here today. I am Dr. Marilyn Steele, director of Planning and Community Activities for the Charles Stewart Mott Foundation of Flint, Mich., but I am here as a private citizen who has paid her own way on a matter of personal concern on which I have done personal research rather than job-related research.

I was commissioned by Project Baseline for the National Advisory Council on Vocational Education to do research into a matter called "Women in Vocational Education". I have that report here with me today, and I request that it be entered into the record.

[Report referred to appears as an appendix, at the end of the hearing.]

Dr. STEELE. In addition, I have prepared a break-out of enrollments in vocational education by the 17 States represented by the members on this subcommittee. I also request that that be entered into the testimony.

[Summary of statistics follows:]

SUMMARY OF STATISTICS OF ENROLLMENT BY SEX IN VOCATIONAL EDUCATION PROGRAMS IN 17 STATES

TABLE 1.—TOTAL ENROLLMENT IN VOCATIONAL EDUCATION IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama	166,498	44	56
California	1,233,920	54	46
Florida	604,878	58	42
Hawaii	45,100	53	47
Illinois	1,379,714	47	53
Iowa	133,442	52	48
Kentucky	164,869	52	48
Michigan	342,985	50	50
Minnesota	301,451	61	39
New York	919,921	70	30
North Carolina	487,393	49	51
Ohio	447,157	53	47
Oklahoma	108,018	44	56
Pennsylvania	327,458	49	51
South Dakota	26,370	61	39
Vermont	16,953	50	50
Washington	257,836	56	44

Source: "Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972," Washington, Office of Education, Department of Health, Education, and Welfare, June 1973, p. 31.

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SUMMARY OF STATISTICS OF ENROLLMENTS BY SEX IN VOCATIONAL EDUCATION  
PROGRAMS IN 17 STATES—Continued

TABLE 2.—TOTAL ENROLLMENT IN AGRICULTURE, IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama.....	47,186	5	95
California.....	53,999	18	82
Florida.....	35,066	9	91
Hawaii.....	2,348	21	79
Illinois.....	30,335	6	94
Iowa.....	29,813	3	97
Kentucky.....	20,190	3	97
Michigan.....	13,897	9	91
Minnesota.....	34,180	10	90
New York.....	18,420	8	92
North Carolina.....	33,768	7	93
Ohio.....	34,355	8	92
Oklahoma.....	23,768	1	99
Pennsylvania.....	14,052	9	91
South Dakota.....	4,612	2	98
Vermont.....	1,398	10	90
Washington.....	15,680	12	88

Source: "Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972," Washington: Office of Education, Department of Health, Education, and Welfare, June 1973, p. 34.

TABLE 3.—TOTAL ENROLLMENT IN DISTRIBUTIVE EDUCATION IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama.....	8,796	48	52
California.....	70,494	41	59
Florida.....	55,350	45	55
Hawaii.....	11,680	45	55
Illinois.....	23,808	41	59
Iowa.....	4,336	38	62
Kentucky.....	11,943	39	61
Michigan.....	38,872	36	64
Minnesota.....	15,821	42	58
New York.....	28,527	45	55
North Carolina.....	18,697	47	53
Ohio.....	44,833	50	50
Oklahoma.....	5,921	55	45
Pennsylvania.....	12,055	61	39
South Dakota.....	1,465	50	50
Vermont.....	751	42	58
Washington.....	16,764	44	56

Source: "Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972," Washington: Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 35.

TABLE 4.—TOTAL ENROLLMENT IN HEALTH OCCUPATIONS IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama.....	2,876	89	11
California.....	43,555	85	15
Florida.....	21,113	79	21
Hawaii.....	461	78	22
Illinois.....	17,682	83	17
Iowa.....	11,430	84	16
Kentucky.....	3,325	84	6
Michigan.....	14,598	91	9
Minnesota.....	4,468	89	11
New York.....	32,851	87	13
North Carolina.....	24,389	87	33
Ohio.....	8,820	96	4
Oklahoma.....	4,628	90	10
Pennsylvania.....	12,865	92	8
South Dakota.....	470	93	7
Vermont.....	436	97	3
Washington.....	6,957	89	11

Source: "Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972," Washington: Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 36.

SUMMARY OF STATISTICS OF ENROLLMENTS BY SEX IN VOCATIONAL EDUCATION  
PROGRAMS IN 17 STATES—Continued

TABLE 5—TOTAL ENROLLMENT IN CONSUMER AND HOMEMAKING PROGRAMS IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama.....	42,097	96	4
California.....	201,948	92	8
Florida.....	189,760	91	9
Hawaii.....	15,639	82	18
Illinois.....	28,572	86	14
Iowa.....	47,720	92	8
Kentucky.....	51,131	93	7
Michigan.....	74,871	86	14
Minnesota.....	139,817	91	9
New York.....	373,259	98	2
North Carolina.....	127,823	88	12
Ohio.....	137,332	86	14
Oklahoma.....	30,564	95	5
Pennsylvania.....	55,454	92	8
South Dakota.....	13,221	95	5
Vermont.....	5,607	89	11
Washington.....	72,216	85	15

Source: "Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972," Washington Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 37.

TABLE 6—TOTAL ENROLLMENT IN WAGE-EARNING HOME ECONOMICS IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama.....	16,445	86	14
California.....	382,850	76	24
Florida.....	104,012	83	17
Hawaii.....	10,664	74	26
Illinois.....	230,303	69	31
Iowa.....	11,945	75	25
Kentucky.....	23,219	91	9
Michigan.....	64,834	76	24
Minnesota.....	30,691	75	25
New York.....	273,849	74	26
North Carolina.....	32,723	69	31
Ohio.....	52,830	79	23
Oklahoma.....	11,087	74	26
Pennsylvania.....	77,668	82	18
South Dakota.....	1,425	90	10
Vermont.....	2,242	85	15
Washington.....	62,081	75	25

Source: "Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972," Washington Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 38.

TABLE 7—TOTAL ENROLLMENT IN OFFICE OCCUPATIONS IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama.....	16,445	86	14
California.....	382,850	76	24
Florida.....	104,012	83	17
Hawaii.....	10,664	74	26
Illinois.....	230,303	69	31
Iowa.....	11,945	75	25
Kentucky.....	23,219	91	9
Michigan.....	64,834	76	24
Minnesota.....	30,691	75	25
New York.....	273,849	74	26
North Carolina.....	32,723	69	31
Ohio.....	52,830	77	23
Oklahoma.....	11,087	74	26
Pennsylvania.....	77,668	82	18
South Dakota.....	1,425	90	10
Vermont.....	2,242	85	15
Washington.....	62,081	75	25

Source: "Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972," Washington Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 39.

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SUMMARY OF STATISTICS OF ENROLLMENTS BY SEX IN VOCATIONAL EDUCATION  
PROGRAMS IN 17 STATES -Continued

TABLE 8 - TOTAL ENROLLMENT IN TECHNICAL EDUCATION PROGRAMS IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama	847	9	91
California	54,695	9	91
Florida	28,789	17	83
Hawaii	628	4	96
Illinois	13,248	13	87
Iowa	1,453	9	91
Kentucky	1,252	2	98
Michigan	17,484	9	91
Minnesota	8,050	7	93
New York	31,526	7	93
North Carolina	11,751	13	87
Ohio	6,812	6	94
Oklahoma	4,943	10	90
Pennsylvania	19,773	15	85
South Dakota	425	1	99
Vermont	496	3	97
Washington	9,185	18	82

Source: Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 40

TABLE 9 - TOTAL ENROLLMENT IN TRADE AND INDUSTRIAL EDUCATION IN 17 STATES, 1972

State	Total	Percent female	Percent male
Alabama	41,879	9	91
California	290,342	12	88
Florida	98,331	12	88
Hawaii	12,612	7	93
Illinois	202,762	10	90
Iowa	24,505	6	94
Kentucky	36,625	3	97
Michigan	96,232	15	85
Minnesota	55,210	20	80
New York	154,830	18	82
North Carolina	153,071	18	82
Ohio	95,503	9	91
Oklahoma	32,758	14	86
Pennsylvania	128,776	13	87
South Dakota	3,971	7	93
Vermont	5,340	7	93
Washington	55,550	13	87

Source: Vocational and Technical Education Selected Statistical Tables, Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 41.

Dr. STEELE. Human equality as a political concept has its origin in America when it was established July 4, 1776, with these words:

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness; that to secure these rights governments are instituted among men, deriving their just power from the consent of the governed."

While we have talked in lofty terms for 199 years about being a Nation of individuals, we have in fact been a Nation divided by groups, categorized by sex, by race, by ethnic identity, by religion, and even by economic class.

There is a story that illustrates this fairly well. It is said that the College of Cardinals were meeting in Rome some time ago to discuss the issue of the laity participating in decisionmaking within the church, but Cardinal Guiseppe was missing.

He rushed in, breathless, and said: "I have some good and some bad news. The good news is the Messiah has come," but he looked

crestfallen and he said, "but the bad news is she has gone to Salt Lake City."

The 20th century has been singularly marked by legislation, by peaceful assembly and by violence as these groups have attempted to secure through legal processes their rights.

The final issue in this quest for social justice is the one great universalizing cause: Equality of opportunity for women, for black women, for brown women, for red women, for all women.

When our Nation enforces the laws and actualizes the customs and the institutions to respect each person as an individual, the goal of human equality will have been achieved. To that end, this testimony is submitted.

Over 33 million women who represent 44 percent of all women of working age comprise about 40 percent of the labor force today.

The more education a woman has, the likelier she is to work outside the home, but women are very much concentrated, concentrated in teaching, health, and office occupations in contrast to the broad range of higher paying occupations in which men are distributed.

Women's earnings in 1972 only 60 percent of men's earnings. The more education adults attain, the higher their median earnings, although women earn consistently less than men.

Women work because of economic need, contributing two-fifths of the family income and often determining the difference between poverty and middle incomes for their families.

Families with a female head, unfortunately, are increasing in our society. Two-thirds of the women workers without husbands earn half of what a male head of family earns or else their husbands can earn less than \$7,000.

The number of divorces are increasing in our society, as evidenced by the fact that last year there was an increase of 6 percent in the number of divorces over the previous year.

Women without husbands have four possible sources of support: alimony, pensions, welfare, or a job. Those with small children have the complicating factor of child care; 73 percent of federally assisted welfare recipients are women and children.

Discrimination against females and sex stereotyping in vocational education are critical factors in the lower paying jobs for women, and current school practices are contributing to the burgeoning welfare caseloads of women and children in our society.

Today I want to review four of the areas that contribute to the lower paying jobs of women and the burgeoning caseloads. We want to look together at restrictive student enrollment practices. We want to look at sex discrimination on policy boards in vocational education, and we want to look at sex discrimination in instructional practices.

I am going to use overlays. May I have the first overlay please. [The overlay was shown.]

You will notice either in the testimony or those of you who can see the overlays that there is a distinct difference in the enrollment patterns of males and females in our school system, and that women tend to be concentrated in four of the areas and men are concentrated also in four of the areas.

Agriculture is a male-intensive vocational program with 95 percent male enrollments. All of the eight Office of Education instructional programs within agriculture are overwhelmingly male.

Agriculture pays \$5,432 in forestry up to a range of \$48,700 for commercial farming. Agricultural production paid an average of \$18.150 in the same year that these figures were recorded for student enrollments in our public schools.

Distributive education is the only vocational area where males and females enroll in almost equal numbers, the females representing 45 percent of the total enrollments.

Women, unfortunately, when they set out into the work world tend to be concentrated in retail selling where the average general merchandising paid \$82 a week, but men tend to be concentrated in the higher paying wholesale selling.

As a consequence, women in retailing earn only 60 percent as much as a man does.

The next area is health occupations. This is another area where girls are concentrated, with young women comprising 85 percent of the total enrollments.

Instructional programs are female-intensive, 15 of the 17, with 50 percent of them concentrated in three areas, in practical nursing where job-entry wages were \$120 a week in 1973; in nurse associates where registered nurses averaged \$8,100 annually in 1973; and in nurses aide where job-entry wages averaged \$97 a week in 1973.

The fourth area is in homemaking. Homemaking is overwhelmingly the largest area of vocational education, with more than 49 percent of the total female enrollments.

In secondary education, homemaking represents two-thirds of the enrollments. Of aggregate enrollments in homemaking, 92 percent are female.

Unfortunately, only 2 percent of all enrollments in homemaking are in wage-earning programs, so that they are designed to earn a living, and the question ought to be raised here: Should non-wage-earning-home economics be classified as vocational?

Let us talk about some of the programs. For example, young women in consumer education within homemaking account for less than 3 percent of the total enrollment, and this is a critical figure in our society when we need to have knowledge of how to manage our personal finances and so on.

Another area is child development which only enrolls 6 percent of the total enrollment.

One of the ways we may think about solving this problem is by mixing the classes of male and female, and I have a friend who is a homemaking specialist who succeeded in getting classes integrated with boys and girls in the same class, but imagine her horror when she went into a class and found all 30 students sitting together making aprons.

Office occupations enroll the second largest number of women; 87 percent of the female enrollments, however, are in accounting, filing, stenography, and typing.

Accounting paid less than \$500 a month. Filing and office machines paid \$96 a week. Stenography paid \$548 a month, and typing paid

\$109 a month as the average entry-level wage in 1972. That is another female-intensive program.

We now turn to the next program. In technical education, women are less than 10 percent of the total, and all 32 of the Office of Education instructional programs are strongly male intensive. Average annual income for entry-level positions in 13 of those technical occupations was \$8,165 in 1972.

The final program we are going to look at today is in trade and industrial education. Females account for only 12 percent of the total enrollment, which has more program options than any area of vocational education.

It also happens to be where the largest number of male enrollments are involved. Of the 45 programs, 40 are strongly male intensive.

In 1972, women were 28 percent of the total employees in the skilled trades, for which these programs prepared, but most were concentrated in the less skilled, lower paying jobs.

I am from Michigan where we have a concentration of blue-collar women in our industrial plants. Women craftworkers earn 53 percent as much as men craftworkers on the average.

In cosmetology, which is a strong female occupation, 94 percent female enrollments, paid \$150 weekly entry-level wages, while barbering, 83 percent male enrollments, paid \$187 per week at job entry in 1972.

Of the 136 Office of Education instructional programs, girls comprise a majority of enrollments in only 48 areas. Girls who enroll in female-intensive vocational programs are further limited to 33 wage-earning course options.

Thus, boys have three times the options within male-intensive programs as girls have in female-intensive programs.

Can we have the second overlay please? [The overlay was shown.]

You compare these limited vocational education options for girls with the Bureau of the Census tabulations for 1970 that show that 50 percent of employed women were concentrated in 21 occupations, while 50 percent of employed men were spread throughout 65 in 1969.

The same 3 to 1 ratio exists, that restrictive enrollment patterns for girls in high school lead to fewer opportunities for women in the world of work.

Of 75 technologies in postsecondary education—we are talking about community college education, and so forth, and those in technical institutes—women were the majority of enrollments in only 17 occupational programs, while the majority of men selected an occupational program from four technical areas, including data processing, natural science, public service and so on. Women were concentrated in two health and office occupations.

Within the two female-intensive technical areas, women are a majority within four male-intensive areas or programs spread throughout 32 occupations programs.

May we have the next slide please. [The overlay was shown.]

This one shows you the enrollment in postsecondary education. Those occupations in which girls aggregate lead to lower paying jobs than those in which boys predominate.

The socially determined custom, accepted and reinforced by our public schools, of preselection of occupation by sex perpetuates the problem of low wages for women in adult life.

Now will you put on the next one on skilled trades? [The overlay was shown.]

I am going to show you the occupations which are higher paying. The skilled trades are those areas in which women should be applying for jobs and which our schools should be preparing women to enter.

Another area I would like to briefly discuss with you is an area that schools don't like to talk about, and that is the girl school dropout.

Girls drop out of high school chiefly for one reason, pregnancy. Fewer than one-third of our public school districts are making provisions for enrolling pregnant teenagers. This issue is raised here because more than 210,000 schoolage girls give birth each year.

The consequences of pregnancy are overwhelming to the teenager. Whatever options about a future life she may have had suddenly are very limited, and she is faced with hard and immediate decisions to make.

Many will drop out of school. The younger the girl is, the greater the likelihood that she will never return to school.

What are the consequences to the young mother? Schoolage girls are medically high risks. They have more complications with pregnancy and delivery than older women. Some of the complications are biological, but more are societal linked to poor nutrition and lack of prenatal medical care.

But what are the consequences to the child? Premature, underweight babies are high risks in two ways: High risk for infant mortality and high risk for birth defects.

Prematurity and low birth weight have been linked to epilepsy, cerebral palsy, mental retardation, and higher risks of blindness and deafness. Those running the highest risk of having an infant of low birth weight are unmarried low-income women under the age of 15.

Of pregnant girls who drop out of school, the majority do not return. A loss to the society of a productive talent missing out on the opportunity for school-related skill development.

As you consider the costs of public assistance for mother and child, consider additional costs for her subsequent children, extra medical costs for infants with serious health problems, plus the possibility of special education within 5 years.

Pregnant girls, more than other students, need immediate job skills because they will have two to support, and vocational education is in a prime position to be of assistance.

Well, let us turn to the area of staff statistics. The educational organization is a pyramid dominated by men. Statistics are unavailable on the sex distribution of instructional staff in vocational education, but women seldom are encountered in technical fields—other than health and office occupations, food service, or textile technology.

We have overlay No. 3. [The overlay was shown.]

All right. This gives you the picture that compares all of those statistics that are presently available on the average entry level wages paid.

The socially determined custom, accepted and reinforced by our public schools, of preselection of occupation by sex perpetuates the problem of low wages for women in adult life.

Now will you put on the next one on skilled trades? [The overlay was shown.]

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We have overlay No. 3. [The overlay was shown.]

All right. This gives you the picture that compares all of those statistics that are presently available on the average entry level wages paid.

You will notice that in every single category, whether by hours, weeks, months, or years, that women are in lower paying areas.

(Can we have the next slide please? [The overlay was shown.]

There is the staffing pattern of our public schools. Women make up 66 percent of this staff of the instructional staff in our public schools, but they have been decreasing of recent years. There was a point in time at which women accounted for some 75 percent of the elementary principals. They have been reduced to 19.6 percent.

At the junior high level, women are less than 4 percent of the junior high school principals, and in the senior high schools they are approximately 1 percent.

When you get to the area of superintendency, women are less than 0.1 percent.

It is evident that our public schools—promotional positions tend to be filled by men.

The vocational programs in which girls are concentrated make up 53 percent total enrollment in vocational education. The teachers assigned to those programs comprise only 48 percent.

(Can we have the next overlay? [The overlay was shown.]

All right. Now, what does that suggest? That suggests to us that those programs in which girls are concentrated likely have higher pupil/teacher ratios than those in which boys are concentrated, suggesting that girls have less opportunity for a teacher's time than boys do.

The area of home economics which I just pointed out to you tends to be one of the areas that has the highest pupil/teacher ratio. In home ec. 30 percent of the total enrollment are taught by 18 percent of the teachers. Now, contrast that with the places where boys have their highest enrollment—trade and industrials. Twenty-one percent of the enrollments are taught by 29 percent of the total staffs.

Secondary vocational education customarily discriminates against both female students and female teachers.

We do want to talk to you a little bit about counselors in our public schools because counselors have come in for a great deal of criticism lately because evidence exists that counselors are doing a less effective job in the area of occupational information than they are in academic learning.

One study of 400 students in an urban high school indicates that counselors actually provide less time to students in the area of vocational education.

When I interviewed four officers in labor unions who were women, fortunately, in Detroit—Moselle McNoriell—one of her comments had to do with occupational counseling and how poor it was for students in our public schools.

A study out of the State of Minnesota of counselors with 100 percent return done by the State Department of Education in Minnesota indicates that both male and female counselors are guilty of stereotyping girls in suggesting traditional occupational roles to them.

This is particularly prevalent in Minnesota among the youngest counselors, 25-45 years of age. Girls must be counseled to go into higher paying technical and trades and industrial occupations.

In a study of community attitudes toward school, high school principals in Culver City, Calif., last November, reflected the same elitism by judging the performance of their schools in terms of the percentage of graduates who went on to college. An elitist philosophy pervades the school system, that academic learning is superior to manual dexterity.

We talk about staff patterns in colleges and universities. Nineteen percent of the faculty are women, so the higher you go in our academic system, the fewer the women become.

While the majority of high school graduates are girls, only 45 percent of those enrolling for the first time in programs of higher education are girls.

As for completors of undergraduate education in 1970-71, 44 percent of associate degree programs and 43 percent of bachelor's degrees were conferred upon women.

The discipline of education grants more degrees than any other and women dominated the total number of graduates by 36 percent. They were a majority of the master's degrees in only six disciplines and a majority of the doctorates only in home economics.

Within programs of education, women were widely dispersed everywhere except in agricultural education and industrial arts. Of the master's degrees granted in vocational education, women received 41 percent dispersed through—96 percent of those were in nursing education; 90 percent in home economics; 60 percent in the business program; but only 5 percent in industrial arts and less than that in agricultural education.

At the doctoral level in vocational education, while women received 30 percent of the total degrees granted, they were a majority only in—you guessed it—home economics and nursing education. Nine percent of those doctorates were in educational administration.

This is a critical area that I want to talk briefly about, but the schools convince our girls that it is indeed a man's world.

Let us turn to the area of policy boards and who is on the policy boards. In 1922 women were 10.5 percent of the school board members. Today they are about the same, 10.1 percent. Of the 52 presidents of State boards of education in 1972, only 4 percent were women. During 1973-74, only one woman was a chief State school officer.

In the U.S. Office of Education in 1972 there were four men and no women of GS grade 18, and only three women among 48 people at grades 17 and 16.

OK. Could we have the next overlay. [The overlay was shown.]

This should be table 5. These are the policy board memberships in vocational education. As for the State directors of voc ed, there are no women among our 50 States. The chairpersons in the State councils of voc ed—12 percent are women. Of the executive directors of State councils, 4 percent are women. Of our State advisory councils, 14 percent are women. On the national advisory board, only 18 percent are women, 4 of the 22.

While women are 15 percent of the labor unions, they hold 7 percent of the collective bargaining positions and only 2.5 percent of the international policy boards.

Women are not represented in elected or appointed positions, decisionmaking roles, at either the State or the national level, but women are two-thirds of the complete aggregation in vocational, technical education.

I am not really going to say very much about those instructional practices that contribute to sex discrimination and sex stereotyping, such as textbooks that show men in jobs and mothers with their aprons in the kitchen, or the fact that fewer girls enroll in mathematics beyond algebra and geometry which limits them later in the world of work, or that physics and electronics are almost as segregated as industrial arts, or the expectations that boys are better in science and math and that girls don't do so well there, or that physical education is another class that discriminates in favor of males who generally have more class options than girls.

One of the things that is so serious here is that it is just as important for women to keep physically fit after age 30 as it is for men.

The question becomes: What can we do to correct these inequities? First of all, we can enforce the law. New HEW guidelines for enforcement of title IX of the Education Amendments of 1972 have been released.

Segregated classes are illegal. In vocational education, home-making must broaden its appeal to secure voluntary male enrollments, as well as have students enroll in those critical areas that have to do with the maintenance of human life and human well-being in our economic system.

The second recommendation is that national, State, and local advisory boards of vocational education should have equal numbers of women and men. Vocational administration, like school administration, generally is a male power base.

We need women on policy boards in equal numbers, but we need articulate, well-qualified women who will speak up: We do not need pretty women who will sit passively by and say nothing.

The third recommendation in the solution to the paucity of school administrators must originate in university departments of educational administration, where presently only 2 percent of the faculty are women.

I received a doctorate of education degree from a prominent institution in Michigan in educational administration. I spent 2 years there and interviewed the chairman of the department, asking about employment opportunities. He looked at me and said, "Marilyn, the only woman I know who is in educational administration at the university level died 2 years ago," but they had taken my money and enrolled me in classes to prepare me for something that was impossible for women, so they said.

If we are going to open up administrative positions either in vocational education or in education generally, women must be both in educational administration and be on the faculty.

Fourth, inservice education is needed to create awareness of the unequal opportunities which exist and to alert the staff to eliminate discriminatory instructional methods.

We need to change our curriculum. We must have a more humanistically individual oriented public school system.

A special problem exists for counselors. They are poorly prepared in their knowledge about occupations and the current job market and job outlook. They need a clearinghouse of information from the local employment commission to keep their information current.

If girls are to prepare for higher paying jobs, counselors must encourage them to enroll in male-intensive programs, especially in new fields of technology and in those trade and industrial classes, in preapprenticeship programs, where there are 45 options for boys, and when we compare with the other forum where girls have only six options in homemaking that leads to the the world of work, this implies that counselors must have awareness of professional and technical occupations which are expected to increase in our society by 39 percent.

The issue of pregnant girls—we must mandate programs for pregnant girls in our public schools, and, when I discussed this last Saturday in Detroit, an older educator came up to me and said: "Marilyn, for Heaven's sake, mention the fact that family planning is needed to prepare these girls, to provide information for them. They need access to it."

Related to this is the fact that we ought to have continuing day care centers with flexible hours so that mothers of young children can go on earning and learning, whether they are in public school, post-secondary, or higher education, because the only alternative for an unskilled female head of the household without support is welfare.

A principal approached me last Thursday and said to me: "Marilyn, in Michigan the problem is not keeping the girl in school during pregnancy. The problem occurs 3 months after the baby is born when auntie or grandma or older sister gets tired of taking care of the baby and the girl has to drop out of school because there is no one to take care of her child."

Well, that about does it. Thank you very much for the opportunity to appear here. Once we eliminate stereotyping in our schools, girls and boys will have greater freedom to choose satisfying careers and life roles. It is important not just for the females of our society, but for all of our society.

The humanization of our institutions should result in a more equitable society in which all of us can become self-realized persons. Thank you.

Mrs. CHISHOLM. Thank you very much, Dr. Steele, for that most illuminating testimony. Without objection, your prepared statement will be made part of the record.

[Prepared statement referred to follows:]

PREPARED STATEMENT OF MARILYN STEELE, PH. D., DIRECTOR OF PLANNING AND COMMUNITY ACTIVITIES, FLINT, MICHIGAN

Madame Chairperson, I am Dr. Marilyn Steele, Director of Planning and Community Activities for the Charles Stewart Mott Foundation of Flint, Michigan. However, I have paid my own way to appear here as a private citizen to provide information about a matter of personal concern and personal research rather than employment research. I was commissioned by Project Baseline for the National Advisory Council on Vocational Education to prepare a supplementary report, *Women in Vocational Education*. I would like to have that report entered into the record. I have submitted written testimony for the record, but I will summarize my remarks.

Thank you very much for the opportunity to appear before you today.

## INTRODUCTION

Human equality as a political concept in America was established on July 4, 1776, with these words

"We hold these truths to be self-evident, that all men are created equal, that they are endowed by their creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness

"That to secure these rights Governments are instituted among Men, deriving their just power from the consent of the governed."

While we have talked in lofty terms for 199 years about being a nation of individuals, we have in fact been a nation divided into groups, categorized by sex, by race, by ethnic identity, by religion and even by economic class. The twentieth century has been singularly marked by legislation, by peaceful assembly and by violence as these groups have sought to actualize the legal processes to guarantee equality for the individual. The final issue in the quest for social justice is the one great universalizing cause, equality of opportunity for women—for black women, for brown women, for red women, for *all* women. When our nation enforces the laws, and actualizes the customs and the institutions to respect each person as an individual, the goal of human equality will have been achieved. To that end this testimony is submitted.

Over 33 million women who represent 44 percent of all women of working age comprise about 40 percent of the labor force today. The more education a woman has, the likelier she is to work outside the home. Women are concentrated in teaching, health, and office occupations in contrast to the broad range of higher paying occupations in which men are distributed. Women's earnings in 1972 were only 60 percent of men's earnings, but the more prestigious the occupations, the closer women come to narrowing the earnings gap.<sup>1</sup> The more education adults attain, the higher their median earnings, although women earn consistently less than men.

Women work because of economic need, contributing two-fifths of the family income and often determining the difference between poverty and middle incomes for their families. Families with a female head are increasing in our society. The number of divorces increased six percent in 1974 over the previous year, and a record-setting 109 percent increase since 1962.<sup>2</sup> Divorce and separation force many women into the primary support role for their children and themselves. Women without husbands have four possible sources of support: alimony, pensions, welfare or a job. Those with small children have the complicating factor of child care. By far the largest group of working-age adults on welfare are the two and one-half million mothers with no able-bodied male present. Three-fourths of all persons receiving welfare payments and public assistance are women.<sup>3</sup> Economic dependence upon welfare is viewed generally as a symbol of human failure by the middle class American majority whose work ethic is firmly entrenched. Each generation on welfare is affected adversely, not only by financial failure, but by human failure, and the cycle of poverty becomes difficult to break. The human cost to the individual is the most destructive result of welfare in our society.

Overt and covert discrimination against females and sex stereotyping in vocational education are critical factors in the lower-paying jobs of women. Current school practices are contributing to the burgeoning welfare caseloads of women and children in our society.

It is the purpose of this testimony to raise two fundamental questions in pursuit of the goal of equality of opportunity for the individual—academically, socially, and economically.

1. What are those practices in Vocational Education and in our schools generally whose consequences are unequal opportunity for women?

2. What can we do to correct those inequities?

In seeking answers to these two questions four key factors surface.

1. Restrictive student enrollment practices in vocational education.

2. Sex discrimination in staffing patterns in our educational system.

<sup>1</sup> "The Economic Role of Women" reprinted from *Economic Report of the President*, 1973, Washington: Women's Bureau, Employment Standards Administration, Department of Labor, 1973, p. 106.

<sup>2</sup> "Marriages Fell Divorces Rose," *The Flint Journal*, February 28, 1975, p. 1.

<sup>3</sup> "Welfare Myths vs Facts," Washington Social and Rehabilitation Service, Department of Health, Education, and Welfare.

## 3. Sex-discrimination on Policy Boards in vocational education.

## 4. Sex-discrimination in instructional practices.

These four factors will be addressed separately as questions.

1. *What are the Restrictive Enrollment Practices in Vocational Education Which Discriminate Against Female Students?*

Some 11,602,144 persons were enrolled in secondary, post-secondary and adult Vocational Education courses in 1972. Females accounted for 55 percent, a figure that has remained constant since 1970. Females accounted for almost two-thirds of all vocational education students in secondary schools. However, Vocational Education programs show sharp differences in male and female distribution.<sup>4</sup> Boys are concentrated in agriculture, technical education and in trade and industrial programs. Girls are concentrated in home economics, health, and office occupations. Let us look at a comparison of those enrollments.

Home economics, trade and industrial, and office occupations account for 71 percent of all enrollments in Vocational Education. Home economics is the largest program with almost 30 percent of all students. Enrollments by specific Office of Education (OE) instructional title reflect patterns which limit later earnings for young women by leading to lower-paying jobs than male-intensive programs.

TABLE 1.—VOCATIONAL EDUCATION DISTRIBUTION OF TOTAL ENROLLMENTS AND PERCENTAGE BY SEX AND PROGRAM, 1972<sup>1</sup>

	Total enrollments	Percent of total enrollment	Percent female	Percent male
Agriculture.....	896,460	7.7	5.4	94.6
Distribution.....	640,423	5.5	45.3	54.7
Health.....	336,652	2.9	84.7	15.3
Home Economics.....	3,445,698	29.7	91.6	8.4
Office.....	2,351,878	20.3	76.4	23.6
Technical.....	337,069	2.9	9.8	90.2
Trade and industry.....	2,397,968	20.7	11.7	88.3
Special programs.....	1,304,619	11.2	44.7	55.3
Total.....	11,602,144	100.9	55.4	44.6

<sup>1</sup> Includes below grade 9.

Source: Division of Vocational and Technical Education, "Summary Data Vocational Education Fiscal Year 1972" Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, p. 1.

Agriculture is a male-intensive vocational program, with 95 percent male enrollments. All of the eight OE instructional programs are overwhelmingly male from a low of 73 percent in ornamental horticulture to a high of 99 percent in agricultural mechanics. The range in entry-level pay for four of the seven job areas listed in the OE Instructional Titles with annual earnings listed by the Department of Labor for 1972 was from a low of \$5,432 in forestry to a high of \$48,700 for a commercial farmer, with Agricultural Production averaging \$18,150 and Agricultural Resources, owner-operated, averaging \$25,000 per year.

Distributive education is the only vocational area where males and females enroll in almost equal numbers—with females representing 45 percent of the total enrollments. Of the OE instructional titles girls are 67 percent in Apparel and Accessories, 69 percent in Floristry, 62 percent in food services, and 60 percent in home furnishings. The trade business in January, 1973 was the second largest employer of women with a total of 6,300,000 working mostly in retail sales, where nearly half of the employees are women. General merchandising paid average weekly earnings of \$82 per week. However, women are only one-fourth of the higher-paying wholesale trade, which results in an income differential of 60 percent more annual income for men in this field.<sup>5</sup>

Young women comprise 85 percent of total enrollments in health occupations. Fifteen of the 17 OE instructional titles are female intensive. However, 56 percent of the female enrollments are concentrated in three programs.

<sup>4</sup> Division of Vocational and Technical Education, *Trends in Vocational Education Fiscal Year, 1971*, Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, p. 2.

<sup>5</sup> Elizabeth Waldman and Beverly J. McEaddy, "Where Women Work—an Analysis by Industry and Occupation," *Monthly Labor Review*, May, 1974, pp. 4-9.

*Practical Nurse*—Job entry wages averaged \$120 per week in 1973.  
*Nurse Associates*—Registered nurses averaged \$8,100 annually at job entry in 1973.

*Nurses Aide*—Job entry wages averaged \$97.00 per week in 1973.\*

A total of 285,071 young women enrolled in Health Programs in 1972. By January, 1973, 1,600,000 women were employed in hospitals where earnings averaged \$107 weekly.<sup>7</sup>

Homemaking is overwhelmingly the largest area of vocational education with more than 49 percent of the total female enrollments. Of aggregate enrollments in homemaking 92 percent are female. Of the 14 OE instructional titles no course enrolls fewer than 74 percent female and a range as high as 98 percent. Homemaking is divided into two categories, Consumer and Homemaking and Wage-earning Home Economics. Only two percent of all enrollments in homemaking were in wage-earning programs. Even these generally lead to low-paying jobs. Among the 6,803,000 in services, women working in hotels, laundries and dry-cleaners earned average wages between \$76 and \$87 in January, 1973.<sup>8</sup>

It is questionable whether non-wage-earning home economics should be classified as vocational. Yet skills developed in these programs are of such critical importance to human well-being that both males and females ought to be enrolled in them. Young women in consumer education account for less than three percent of the total. Knowledge of consumer education is critical to economic survival in the complex free enterprise system of today. The current prevalence of over-consumption, debt, and bankruptcy suggest the need for all students to gain competency in this area. Child development enrolls only four percent and food and nutrition only six percent of the total female enrollments in Consumer and Homemaking programs. There is no guarantee of a woman in every home to perform domestic tasks. These skills are needed by males and females alike.

Office occupations enroll the second largest number of women. Of the ten OE instructional titles, 87 percent of the female enrollments are in accounting, filing and office machines, stenography, and typing. It is ironic that within a female intensive occupational program area that males are a majority in business data processing and in supervisory and administrative management. Accounting paid \$489 per month, filing and office machines paid \$96 per week, stenography paid \$548 per month and typing paid \$109 per week as the average entry level wages, 1972.<sup>9</sup>

In Technical Education women are less than ten percent of the total and all 32 OE instructional titles are strongly male intensive. Average annual income for entry level positions in 13 technical occupations in 1972 was \$8,165.

In trade and industrial education, females account for only 12 percent of the total enrollments, which has more program options than any area of Vocational Education. Forty of the 45 programs are male intensive. In 1972 women were 28 percent of the total employees in the skilled trades, but most were concentrated in less skilled, lower-paying jobs. In January, 1973 their average weekly earnings were less than \$100.<sup>10</sup>

Average entry level earnings for 19 male intensive occupations in 1972 was \$5.99 per hour. Cosmetology, 94 percent female enrollments, paid \$150.00 weekly entry level wages while Barbering, 83 percent male enrollments, paid \$187 per week entry level wages in 1972.<sup>11</sup>

Of the 136 Office of Education instructional titles, girls comprise a majority of enrollments in only 48 areas. Girls are concentrated in health, homemaking, and office occupations. Only 41 OE instructional titles are offered within these vocational education areas, but eight of them are non-wage-earning. Girls who enroll in female intensive vocational programs are limited to 33 wage-earning course options. By contrast boys who enroll in vocational programs traditionally viewed as male-intensive have 95 wage earning course options. Thus boys have three times the options within male-intensive programs as girls have in female-intensive programs.

\* Bureau of Labor Statistics, *Occupational Outlook Handbook, 1974-75 Edition*, Department of Labor, Washington, U.S. Government Printing Office, 1974.

<sup>7</sup> Waldman and McEaddy, *op. cit.*, p. 6.

<sup>8</sup> *Ibid.*, pp. 10-11.

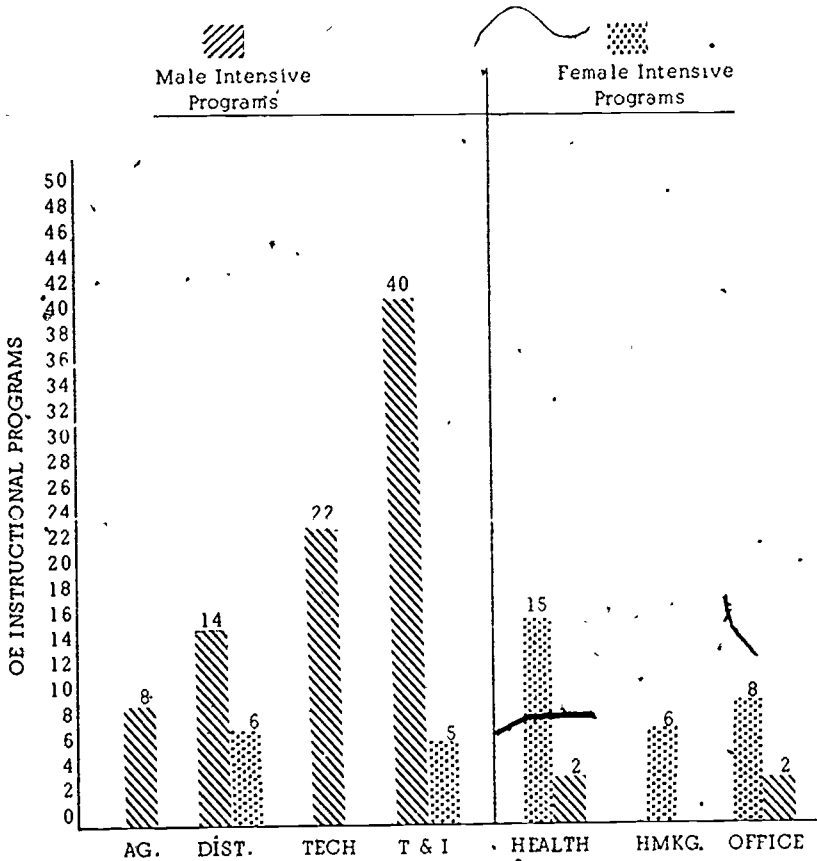
<sup>9</sup> Bureau of Labor Statistics, *op. cit.*

<sup>10</sup> Janice Neipert Hedges and Stephen E. Bemis, "Sex Stereotyping: Its Decline in Skilled Trades," *Monthly Labor Review*, May, 1974, p. 18.

<sup>11</sup> Bureau of Labor Statistics, *op. cit.*

FIGURE 1

## Wage-Earning Vocational-Technical Programs, 1972



Girls have 29 wage-earning instructional program options within the female-intensive Vocational Education programs of health, gainful homemaking, or office; while boys have 84 wage-earning options within the male intensive instructional programs of the four male-intensive Vocational Education programs of agriculture, distribution, technical and trades and industrial. Compare these limited Vocational Education options for girls with the Bureau of the Census tabulations for 1970 that 50 percent of employed women were concentrated in 21 occupations while 50 percent of employed males were spread throughout 65 of the occupations listed in 1969. The same three to one ratio exists. Limited educational options for girls in Vocational Education lead to fewer opportunities for women in the world of work.

Postsecondary education reflects similar patterns of sex discrimination in enrollments in Vocational/Technical programs. Of 75 technologies in postsecondary occupational education, women were the majority of enrollments in 17 occupational programs. While the majority of men selected an occupational program from four technical areas including data processing, natural science, public service or mechanical engineering, women were concentrated in health and office occupations. Within the two female intensive technical areas, women are a majority within four male-intensive areas spread throughout 32 occupational programs.

Of 81 instructional programs in Vocational-Technical education and their corresponding D.O.T. job classification, comparisons are offered between male and female average entry earnings according to entry-level earnings for 1972 or 1973.

FIGURE 2

Distribution of Technological Programs of Post Secondary Education by Sex, 1970-71

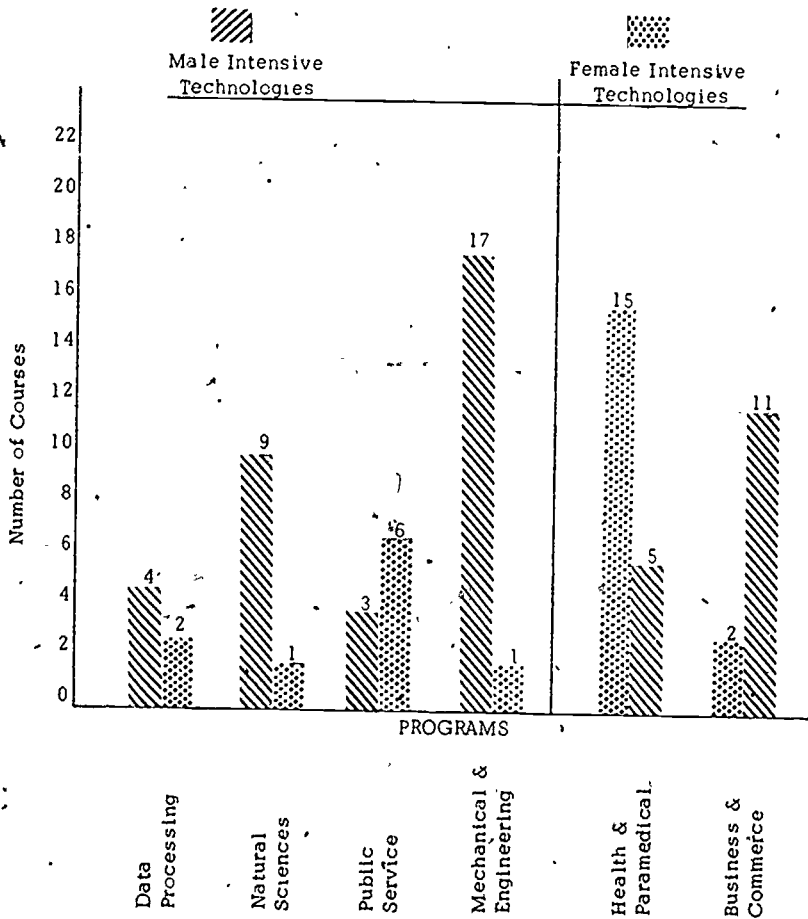


TABLE 2 --COMPARATIVE AVERAGE ENTRY EARNINGS FOR MALE AND FEMALE, 1972-73

Sex	Earnings by hours	Weeks	Months	Year
Female	\$2 19	\$130 05	\$561 23	\$6,502. 12
Male	4 22	139 87	837 50	9,744. 14

Source: Summary of "Summary Data Vocational Education Fiscal Year, 1972," Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, pp 12-17.  
Bureau of Labor Statistics, "Occupational Outlook Handbook, 1974-75 Edition," Department of Labor, Washington  
U.S. Government Printing Office, 1974

Those occupations in which girls aggregate lead to lower-pay jobs than those in which boys predominate. The socially determined custom, accepted and reinforced by the schools, of pre-selection of occupation by sex perpetuates the problem of low wages for women in adult life.

Few situations are more seriously discriminatory than the female high school dropout. Girls drop out of high school chiefly for one reason: pregnancy. Fewer than one-third of our public school districts make provisions for enrolling pregnant teenagers. Most schools have regulations to exclude the pregnant teenager, some as soon as staff are aware of her pregnancy. Others establish a time limit. In a study of 17,000 school districts reported in the *American School Board Journal* in April 1971, only 5,450 districts provide for pregnant girls.

Some school districts let pregnant girls attend night school and adult education classes. Some provide a homebound teacher. Some schools allow the girl to remain on her regular program. A few districts provide regular programs plus tailor special pre-natal services.

This issue is raised here because more than 210,000 school age girls give birth each year. The consequences of pregnancy are overwhelming to the teenager. Whatever options about her future life style she may have had, suddenly are very limited and she is faced with hard and immediate decisions. Many will drop out of school. The younger the girl is, the greater the likelihood she will never return to school.

What are the consequences to the young mother? School age pregnant girls are medically high risks. They have more complications with pregnancy and delivery than older women. Some of the complications are biological, but more are societal linked to poor nutrition and lack of pre-natal medical care. By the time the child is born 60 percent of the mothers will be married.<sup>12</sup>

What are the consequences to the child? Young mothers are much more likely than older women to have premature babies with low birthweights. Premature, underweight babies are high risks in two ways—high risk for infant mortality and high risk for birth defects. Prematurity and low birthweight have been linked to epilepsy, cerebral palsy, mental retardation, and higher risks of blindness and deafness. Those running the highest risk of having an infant of low birthweight are unmarried, low-income women under the age of 15.<sup>13</sup>

And what are the social consequences of teenage pregnancy? Our educational, economic, and welfare systems are all affected. Of pregnant girls who drop out of school, the majority do not return, a loss to the society of a productive talent missing out on the opportunity for school-related skill development. Of those teenagers forced into a hasty marriage, the likelihood of future divorce is high. Teenage mothers who give birth out of wedlock and who receive public assistance have an average of eight additional children in subsequent years.<sup>14</sup> As you consider the costs of public assistance for mother and child, consider additional costs for her subsequent children, extra medical costs for infants with serious health problems, plus the possibility of special education within five years. These students need to be enrolled in homemaking courses that will prepare them with health and nutrition and knowledge of child develop-

<sup>12</sup> Marian Howard, "Pregnant School Age Girls," *The Journal of School Health*, September, 1971, p. 381.

<sup>13</sup> Jane Menkin, "The Health and Social Consequences of Teenage Childbearing," *Family Planning Perspectives*, July, 1972, p. 50.

<sup>14</sup> Jeffrey R. Heller and John Kiraly, Jr., "An Educational Program for Pregnant School-Age Girls," *The Clearing House*, August, 1973, p. 477.

nient Pregnant girls more than other students need immediate job skills because they will have two to support.

## 2 How Do School Staff Statistics Reflect Sex Stereotyping?

The educational organization is a pyramid dominated by men. The foundation is composed of a female elementary staff mainly working with youngsters in elementary school. While two-thirds of the teaching staff are female, nowhere are women in the majority of power positions, and the higher the grade level the fewer the women. Statistics are unavailable on the sex distribution of instructional staff in vocational education, but women seldom are encountered in technical fields other than health and office occupations, food service or textile technology. Twenty percent of elementary principals are women. Three percent of junior high principals are women. One percent of senior high principals are women. Less than 0.01 percent of superintendents are women. Women administrators are concentrated in elementary school or middle management positions.

TABLE 3—STAFF SURVEY OF PUBLIC SCHOOL PROFESSIONAL PERSONNEL, 1972-73

Position	Numbers of persons		Percentage distribution	
	Total	Women	Total	Women
<b>Instructional staff</b>				
Teachers	2,110,368	1,401,284	100.0	66.4
Principals				
Elementary (including teaching principals)	48,196	9,446	100.0	19.6
Junior high	9,374	272	100.0	2.9
Senior high	15,827	222	100.0	1.4
Total principals	73,397	9,940	100.0	13.5
Assistant principals				
Elementary	6,483	1,997	100.0	30.8
Junior high	7,817	594	100.0	7.6
Senior high	13,289	850	100.0	6.4
Total assistant principals	27,589	3,441	100.0	12.5
Other instructional staff				
School librarians	40,540	37,216	100.0	91.8
Counselors	49,770	23,392	100.0	47.0
School nurses	17,074	16,835	100.0	98.6
Other	33,691	16,879	100.0	51.0
Total other instructional staff	2,352,429	1,508,987	100.0	64.1

Source: "Research Report, 1973 R 5," Twenty-sixth Biennial Salary and Staff Survey of Public School Professional Personnel National Education Association, 1972-73, p. 9.

The Vocational Education programs in which girls are concentrated, health, home economics, and office make up 53 percent of the total enrollment in Vocational Education. Teachers assigned to those programs comprise only 48 percent of the total teachers in Vocational Education. The situation is particularly acute in home economics where 30 percent of the total enrollment are taught by 18 percent of the teachers. In contrast, in trade and industrial 21 percent of the enrollments are taught by 29 percent of the total staff. Girls are concentrated in classes where they have less instructional time from the teacher because of higher pupil/teacher ratio. Conversely women vocational teachers are likely to be assigned to classes with higher pupil teacher ratio than men vocational teachers. Thus, secondary Vocational Education customarily discriminates against both female students and female teachers.

While more than 50 percent of the students in secondary schools are girls, school counselors are 47 percent female. While counselors are in a strong position to influence occupational choice, a study at Louisiana State University confirmed that parents are the decisive influence. Girls ranked mother first and father fourth with "person in occupation" and "friend" preceding father as major influences on their occupational choice. Boys ranked father first and mother second and counselors ranked fifth by both sexes.<sup>15</sup>

<sup>15</sup> C. L. Mondart, Sr. and Others, "Educational and Occupational Aspirations and Expectations of High School Youth," Baton Rouge, Louisiana State University, Department of Vocational Agricultural Education, 1970.

TABLE 4.—ENROLLMENTS IN VOCATIONAL EDUCATION PROGRAM BY SEX AND THE DISTRIBUTION OF TEACHERS  
1972

Program	Total	Total (percent)	Female (percent)	Male (percent)	Total teachers	Teacher (percent of total)
Agriculture...	896,460	7.7	5.4	94.6	13,270	5.9
Distribution...	640,423	5.5	45.3	54.7	13,795	6.2
Health...	336,652	2.9	84.7	15.3	14,552	6.5
Home economics	3,445,698	29.7	91.6	8.4	41,547	18.5
Office...	2,351,878	20.3	76.4	23.6	52,662	23.5
Technical...	2,337,069	2.9	9.8	90.2	16,820	7.5
Trades and industrial	2,397,968	20.7	11.7	88.3	65,105	29.1
Other...	1,304,619	11.2	44.7	55.3	6,369	2.8

Source: Division of Vocational and Technical Education, "Trends in Vocational Education Fiscal Year 1972," Washington Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 23.

Division of Vocational and Technical Education, "Summary Data Vocational Education Fiscal Year 1972," Washington Office of Education, Department of Health, Education, and Welfare, May, 1973, pp. 12-17.

One study of 400 students in an urban high school indicates that counselors are more effective in academic than vocational counseling. They are providing more assistance in college and university planning than they are expanding student awareness of multiple job opportunities and being helpful in occupational goal setting.<sup>16</sup> Thus, counselors reflect an elitist philosophy that white-collar jobs have more status than blue-collar jobs. Intellect is more valued than manual skills. Academic education has far more prestige than vocational training.

In a survey of community attitudes toward school, high school principals in Culver City, California, in November, 1974, reflected this same elitism by judging the performance of their schools in terms of the percentage of graduates who went to college. Thus, an elitist philosophy pervades the school.

As for women in colleges and universities preparing teachers and administrators, only 19 percent of the faculty are women. Women are 17 percent of the faculty in all universities and 23 percent of the teaching staff in all colleges.<sup>17</sup> Women are unlikely to be college presidents, or vice presidents. Women in college administration are likely to be head librarians, directors of placement or financial aid. There were 3 percent female department heads at the colleges in the survey conducted by the American Association of University Women. Thus, despite being the majority of public school teachers, women are virtually powerless in administration both in public school and in universities, and the higher you go in education the fewer women become.

While the majority of high school graduates are girls, only 45 percent of those enrolling for the first time in programs of higher education are girls. The total enrollment in institutions of higher education in the fall of 1971 was further reduced to 42 percent female.<sup>18</sup>

As for completers of undergraduate education in 1970-71, 44 percent of associate degree programs and 43 percent of bachelor's degrees were conferred upon women.<sup>19</sup>

The discipline of education grants more degrees than any other and women dominated the total number of graduates by three to one. Of all women receiving bachelor's degrees in 1970-71, 36 percent were concentrated in the field of education. They were a majority of the master's degrees in only six disciplines and a majority of the doctorates only in home economics. Thus, college educated women are more confined by academic discipline than by the limited number of occupations in which they are clustered. Within programs of education

<sup>16</sup> Joseph L. Thorne, "The Relationship of the Job Market and Motivational Factors on the Career Goals and Job Choices of Plant High School Seniors," Unpublished Doctoral Dissertation, University of Michigan, 1974, p. 18.

<sup>17</sup> *The Status of Women Faculty and Administration in Higher Education Institutions, 1971-72*, NEA Research Memo, Washington: National Education Association, April, 1973, p. 1.

<sup>18</sup> Kenneth A. Simon and W. Nance Grant, *Digest of Educational Statistics, 1972 Edition*, National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare, Washington, U.S. Government Printing Office, 1973, pp. 52 and 68.

<sup>19</sup> Mary Evans Hooper, *Earned Degrees Conferred, 1970-71*, National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1973, p. 8.

women were widely dispersed everywhere except in agricultural education and industrial arts. This pattern is repeated for master's degrees. At the doctoral level in vocational education, women were a majority only in home economics and nursing education. Of the master's degrees granted in vocational education, women received 41 percent dispersed as follows:

96 percent of MA's in nursing education

90 percent in home economics

60 percent in business, commercial and distributive education

5 percent in industrial arts, vocational, and vocational/technical education.

47 percent in agricultural education

At the doctoral level in vocational education, women received 30 percent of the total degrees granted, but they are a majority (96 percent) only in Home Economics Education and Nursing Education. As for the division that prepares administrators, only nine percent are women.<sup>22</sup>

The schools convince girls in a variety of ways that it is a man's world—with a preponderance of female teachers in elementary school but a dearth of female faculty in higher education and beyond elementary schools, women in administration, including vocational education are very few indeed.

### 3. What Is the Status of Women on Policy Boards?

Women as a major force on school boards have remained constant over the last 50 years. In 1922 women were 10.5 percent of the school board members, today they are 10.1 percent.<sup>23</sup> Of the 52 presidents of state boards of education in 1972, four percent were women. During 1973-74, only one woman was a chief state school officer.

As for Vocational Education, the total current membership of the 56 State Advisory Councils for Vocational Education (includes American Samoa, Guam, Puerto Rico, Virgin Islands, Washington, D.C., and Trust Territory of the Pacific Islands) is 1,180. Women constitute 14 percent of the membership. Six councils have no women. Of the State Advisory Councils of Vocational Education, 12 percent or six of the chairpersons and two of the executive directors are women. Of the 22 member National Advisory Council on Vocational Education, four are women. There are no women among the state directors of vocational education.<sup>24</sup>

TABLE 5 — WOMEN IN POLICY POSITIONS ON STATE AND NATIONAL BOARDS OF VOCATIONAL EDUCATION, 1974

State/National Board	Number of women	Percent women	Total memberships
State Directors of Vocational Education	0	0	50
Chairpersons of State Councils	6	12	50
Executive Directors of State Councils	2	4	50
State Advisory Councils	162	14	1,180
National Advisory Council	4	18	22

Thus, women are not represented in elective or appointive decisionmaking roles at the state or national level. But women are two-thirds of the complete aggregation in Vocational/Technical Education.

### 4. What Are the Instructional Practices That Contribute to Sex Discrimination and Sex Stereotyping in Vocational Education?

Sexism exists everywhere, but schools are guilty of discrimination against females if for no other reason than they reflect the society they serve. The concentration of women teachers and women administrators in elementary schools discriminates against both boys and girls by failing to provide male and female role models in nearly equal numbers. School policies that prevent girls from enrolling in industrial arts or that place all the boys in Bachelor Living classes discriminate against both sexes by sexual segregation within the school.

<sup>22</sup> *Ibid.*, pp. 173-268.

<sup>23</sup> "NSBA Study Shows School Board Quota System Discriminates Against Women, *The School Administrator*, May, 1974, p. 5.

<sup>24</sup> "State Advisory Councils for Vocational Education, Fiscal Year 1974," Mimeographed report, Washington, Division of Vocational and Technical Education, Office of Education, Department of Health, Education, and Welfare, February 28, 1974, p. 1.

Teachers treat boys and girls differently. They assign sex-specific tasks. Girls wash the sink and water the plants and tidy the tables. Boys move the chairs, stack the equipment and empty the wastebaskets. Teachers expect girls to be docile and passive and reward them for their conformity. Grade school boys have more positive feelings about being male and are confident and assertive. Teachers anticipate that boys will be harder to manage than girls. Assigning homework by sex, segregating classroom seating, and encouraging rivalry by segregated games are all discriminatory practices. Some teachers may even show a stronger preference for one sex. Recent studies indicate that while girls' awareness of careers is increasing in variety, they are unable to identify what a day on the job would be like. Boys can describe career activities in detail.<sup>23</sup>

The expectations that boys are more assertive, stronger, that men have a variety of interesting jobs outside the home, even the message that males are more important than females are reinforced in textbooks.

Girls are portrayed in words and pictures as physically inactive and unable to perform tasks requiring strength. Boys are problem solvers and mischief makers. Mothers are shown always at home doing nothing but housework. Fathers are jobholders and decision-makers. The number of stories about boys outnumber the stories about girls. There are many more recognized male heroes of history than there are recognized female heroes. A task force in Princeton, New Jersey spent two years reviewing 134 books from 12 different publishers to locate non-stereotyped texts. They found none. Even library books discriminate.<sup>24</sup> The American Library Association found that boy-central story characters outnumber girls by two to one.

Segregated classes like homemaking and industrial arts, health occupations, pre-apprenticeship programs, auto mechanics and office practice classes with lopsided enrollments of one sex or the other are in direct violation of Title IX of the Education Amendments of 1972. Such practices contribute to the myth that women do not possess manual dexterity. Fewer girls enroll in mathematics beyond fundamental algebra and geometry. Physics and electronics classes are almost as segregated as industrial arts. The expectation that boys are better in science and mathematics bars girls later on from enrolling in technical programs.

Physical education is another class that discriminates in favor of males who generally have more class options than girls. They also have access in intramural and extra-curricular sports—in which few girls have an opportunity to participate. In many communities much more money is spent on male athletic programs than on female athletic programs. Yet it is just as important for women to participate in physical activities to keep fit past 30 as for men.

Stereotypic sex roles in school limit later career opportunities. This results in underutilized female talents and places enormous pressures on men to succeed in a highly competitive world.

The final critical question resulting from an analysis of existing statistics, studies and literature is

#### *What Can We Do To Correct These Inequities?*

1. Enforce the law! New HEW guidelines for enforcement of Title IX of the Education Amendments of 1972 have been released. Segregated classes are illegal. In vocational education, homemaking will have to broaden its appeal to secure voluntary male enrollments. All Vocational/Technical programs will have to give evidence of increasing numbers of enrollees of both sexes. This should result in opening up higher-paying skilled crafts and operatives occupations and science and engineering technologies to women. Combined female/male classes like homemaking/industrial arts with team teachers is an alternative. Currently educational statistics are not being recorded by sex. This is a critical oversight which must be corrected if women are to be able to measure progress.

2. National, State and local Advisory Boards of Vocational Education should have equal numbers of women and men. Vocational administration, like school

<sup>23</sup> Lynne B. Iglitzia, "A Child's Eye View of Sex Roles," Reprint, *The Schools and Sex Role Stereotyping*, Prototype Materials for Conference Organized by National Education Association, November 24-26, 1972.

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<sup>3</sup> Carol Jacobs and Cynthia Eaton, "Sexism in the Elementary School," *Today's Education*, December, 1972, p. 21.

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administration, generally is a male power base. Women must be appointed and elected to policy boards in equal numbers

3 The solution to the paucity of school administrators must originate in university departments of school administration, which bear the responsibility for preparing educators for school management. There are few women enrolling in education administration because there are few women faculty to encourage increasing numbers of women to prepare for administration. Universities must likewise hire women to serve as administrator-models for aspiring women teachers. Until female administrators increase throughout all levels of education, there will be few significant changes for young women, including Vocational Education

4 Inservice education is needed to create awareness of the unequal opportunities which exist and to alert staff to eliminate discriminatory instructional methods. Non sexist texts, curriculum and supplementary materials need developing. Teacher-trainers, administrators and teachers must be retrained.

A special problem exists for counselors. They are poorly prepared in knowledge about occupations and the current job market and job outlook. They need a clearinghouse of information from the local employment commission to keep their information current. If girls are to prepare for higher-paying jobs, counselors must encourage them to enroll in male-intensive programs—especially in new fields of technology and in Trade and Industrial classes, in pre-apprenticeship programs. This implies that counselors must have awareness of professional and technical occupations which are expected to increase by 39 percent.<sup>2</sup> Planning ought to begin immediately to enroll young women and men in non-traditional occupations at all educational levels.

5 Programs for pregnant teenagers should be mandated for public schools. State departments of Vocational Education are in a prime role to prevent the needless heavy caseloads of social service agencies responsible for aiding pregnant teenagers and unwed mothers who are unskilled and unemployable. Public schools and vocational schools should expand the options for teenage mothers by offering special programs in nutrition and child care, career counseling and intensive occupational training. The pregnant teenager is a prime candidate for skill development because she has two to consider in the immediate future.

6. Continuing day care centers with flexible hours are needed by the mothers of young children to make it possible for them to continue their education whether in public school, post-secondary or higher education. The only alternative for unskilled female heads of households without support is welfare.

Vocational education must provide a variety of training programs for persons of all ages, especially those with special needs—and it is plausible to consider women as a less advantaged group. Vocational educators who recognize the potential social and economic impact of vocational education cannot continue to ignore the needs of half their students. Once we eliminate stereotyping in the schools girls and boys will have greater freedom to choose satisfying careers and life roles. Again may I thank you for the opportunity to share my research and analysis with you and close with the thought, the humanization of our institutions should result in a more equitable society in which all women and men may become self-realized persons.

Mrs. CHISHOLM. With the consent of the other members here on the panel, we are going to hear from the other two speakers and then we will ask for questions.

Now we will hear from Ms. Perlman, who is here this morning as a representative of the Coalition of Labor Union Women, but also serves as the director of the department of program development of AFSME.

Ms. PERLMAN. Thank you.

I am here speaking on behalf of the National Coalition of Labor Union Women.

In late March of 1974, trade union women met and organized the Coalition of Labor Union Women. Instead of the 1,000 union women

<sup>2</sup> Women's Bureau, *Careers for Women in the '70's*. Women's Bureau, Employment Standards Administration, Department of Labor, Washington. U.S. Government Printing Office, 1973, p. 3.

expected, over 3,300 women from 58 national or international unions participated.

There are now 31 local Coalition of Labor Women chapters, and that number is growing daily. CLUW is an organization dedicated to meeting the critical needs of women within the framework of the union movement.

Among our objectives are the expansion of efforts to organize women workers, the increased participation of women in union affairs, particularly in policymaking positions, and the support of legislation such as the equal rights amendment, child care, and "livable" minimum wage for all workers, improved medical and pension benefits, and more rigorous enforcement of all legislation affecting women.

One of the reasons that we placed a strong emphasis upon organizing women workers is that unions can provide the political and collective bargaining muscle which women workers need to secure better pay, benefits, and all other conditions of employment.

For example, we earn, on an average, \$1,500 a year more than our nonunion counterparts, and our members have far better benefit packages, including health insurance, sick leave, vacations, pensions, and other benefits.

Out of 33.3 million working women in 1972, only 4.2 million women were unionized. Unionized women are, however, a growing force. From 1958 to 1970, female union membership increased by 1 million, an increase of 30 percent.

One of the biggest problems which working women face is the myth that women work for pin money, for a new hat or for the down payment on a second car.

Let me share with you a typical view. This is a quote from a column by Lindly H. Clark, Jr., written in the Wall Street Journal on March 3, 1975:

The unemployment figure for January, 1975, was pulled up to 8.2 percent largely by the joblessness of teenagers and adult women. The two groups make up relatively larger portions of the labor force than they did a decade or two decades ago.

While many women and teenagers are the chief family breadwinners, many are not. Unemployment is never pleasant but for some it is less pleasant than it is for others.

That kind of remark makes me furious. It sickens me that someone supposedly in the know could be ignorant of and totally insensitive to the facts of life in America for working women.

It makes me as angry as Alan Greenspan, the chairman of the Council of Economic Advisors, remarking that the group most severely affected by the current recession were the stockholders.

The remark of our friend from the Wall Street Journal is typical of the sex bias which women face, and the lack of knowledge of the true status of women workers. I don't know what Mr. Lindley Clark, Jr.'s income is, but I suspect that it is higher than the median family income of \$12,051.

Unfortunately, I get the feeling that when the policymakers in the executive branch, including Mr. Greenspan, or Members of Congress need information about women workers, they go home and ask their wives.

Since most policymaking bureaucrats make over \$20,000, and Mr. Greenspan and Members of Congress earn \$42,500, this is a statistically skewed sampling.

There is a brochure put out by the Women's Bureau entitled, "Twenty Facts on Women Workers," which ought to be required reading for all policymakers.

As the pamphlet points out, women work out of economic necessity. Two-thirds of all women workers are either single, divorced, widowed, or separated, or their husbands earn less than \$7,000 a year.

Working wives employed full time, year round contribute almost two-fifths of their families' income. Twelve percent of these working wives contribute half or more to the family income. They are working to put food in their children's mouths and to pay the rent.

Those with the most serious problem are the female heads of households; a large and growing group. Between 1960 and 1972, the number of households dependent upon women increased 56 percent, from 9.5 million to 14.8 million. A very large portion of these are due to the accelerated rate of separation and divorce.

Studies point out that after 2 years, child support and alimony payments are either completely absent or severely reduced. This means that many women are the only source of income for their families.

Of low-income families, 43 percent are headed by a working woman, and the median income for such families in 1971 was \$5,116, less than half the income of male-headed families. As always, minority women face the most serious problem.

While some 11 percent of all U.S. families are female headed, among black families 34 percent are female headed. Among Puerto Rican families, 32.2 percent are female headed, and among Chicano families, 13.4 percent are female headed.

The phenomena of female-headed minority families has always existed; but as a study done by the Community Council of Greater New York indicates, it is a growing trend.

They report that in the last decade there was an 89-percent increase in black female-headed households, and a 100-percent increase in Puerto Rican female-headed households. The New York study cited above also indicates that 17 percent of all families in New York are now female headed.

One of the most significant aspects of the female work force is that it is increasingly made up of working mothers. From 1940 to 1972, the labor force participation rate of mothers rose almost five times, from 9 to 42 percent. In contrast, the rate for all women workers rose only 1.5 times, from 28 to 43 percent.

Mothers have been entering the labor force since 1948 at a rate of 1 percent a year, despite the decline in the total population of children since 1970. In March 1973, U.S. families had 1.5 million fewer children under age 18 than the year before, but 650,000 more mothers were working, and perhaps most significant of all has been the sharp rise in the numbers of mothers with preschool children in the labor force.

The rate of working mothers with children aged 3 to 5 increased by 13.2 percent to 38.3 percent from 1960 to 1973. The participation

rate of mothers with children under 3 rose by 29.4 percent over the same period.

One of the basic problems of women workers is that they are concentrated in the lower paying jobs. These tend to be those occupations which are female intensive. In fact, the higher the concentration of women in the job category, the lower the wages.

I would like to insert a table for the record, from an article written by Elizabeth Waldman and Beverly J. McEaddy of the Bureau of Labor Statistics for the May 1974 Monthly Labor Review entitled, "Where Women Work—An Analysis by Industry and Occupation." This table shows the average weekly and hourly earnings for non-supervisory workers on private nonagricultural payrolls in selected industries.

Ms. CHISHOLM. Without objection it will be inserted.  
[Table referred to follows:]

TABLE 5—GROSS HOURS AND EARNINGS OF PRODUCTION OR NONSUPERVISORY WORKERS ON PRIVATE NON-AGRICULTURAL PAYROLLS, SELECTED INDUSTRIES, JANUARY 1973

Industry	Average earnings:		Average hours	
	Weekly	Hourly	Weekly	Overtime
Total private.....	\$138	\$3.77	36.6	.....
Mining.....	190	4.60	41.3	.....
Contract construction.....	223	6.42	34.8	.....
Manufacturing.....	159	3.98	40.0	3.6
Durable goods.....	173	4.23	41.0	3.9
Fabricated metal products.....	169	4.13	41.0	3.9
Machinery, except electrical.....	188	4.44	42.4	4.5
Electrical equipment and supplies.....	153	3.80	40.3	3.0
Transportation equipment.....	210	5.00	41.9	4.8
Miscellaneous manufacturing.....	124	3.24	38.4	2.4
Non-durable goods.....	140	3.61	38.7	3.2
Food and kindred products.....	149	3.75	39.8	3.8
Canned, cured, and frozen foods.....	119	3.15	37.8	3.0
Confectionery and related products.....	125	3.29	37.9	2.2
Textile mill products.....	112	2.87	39.1	3.9
Knitting mills.....	99	2.76	35.7	2.4
Apparel and other textile products.....	93	2.72	34.1	1.2
Chemical and allied products.....	181	4.36	41.5	3.5
Leather and leather products.....	103	2.77	37.2	1.0
Transportation and public utilities.....	196	4.87	40.2	.....
Telephone communication.....	175	4.47	39.1	.....
Switchboard operating employees <sup>1</sup> .....	126	3.55	34.4	.....
Line construction employees <sup>2</sup> .....	228	5.23	43.6	.....
Wholesale and retail trade.....	107	3.11	34.5	.....
Wholesale trade.....	158	3.99	39.5	.....
Retail trade.....	91	2.78	32.9	.....
Retail general merchandise.....	82	2.61	31.3	.....
Food stores.....	102	3.20	32.0	.....
Apparel and accessory stores.....	78	2.54	30.6	.....
Eating and drinking places <sup>3</sup> .....	62	2.08	29.7	.....
Motor vehicle dealers.....	152	3.77	40.2	.....
Drug stores and proprietary stores.....	82	2.67	30.7	.....
Finance, insurance, and real estate.....	131	3.54	37.0	.....
Banking.....	114	3.07	37.0	.....
Services.....	111	3.27	33.9	.....
Hotels, tourist courts, and motels <sup>4</sup> .....	76	2.35	32.3	.....
Laundries and drycleaning plants.....	87	2.50	34.7	.....
Hospitals.....	108	3.15	34.3	.....

Data relate to production workers in mining and manufacturing, to construction workers in contract construction, and to nonsupervisory workers in wholesale and retail trade, finance, insurance, and real estate, transportation and public utilities, and services.

<sup>1</sup> Data relate to employees in such occupations in the telephone industry as switchboard operators, service assistants, operating room instructors, and pay station attendants. In 1971, such employees made up 29 percent of the total number of nonsupervisory employees in establishments reporting hours and earnings data.

<sup>2</sup> Data relate to employees in such occupations in the telephone industry as central office craft workers, installation and exchange repair craft workers; line, cable, and conduit craft workers, and laborers.

<sup>3</sup> Money payments only; tips not included.

Source: Bureau of Labor Statistics.

Ms. PERLMAN. Women are concentrated in the lower paid and less skilled jobs. For example, while the average salary for all manufacturing workers was \$159 a week in January 1973, in female-intensive industries the average is much lower. In the apparel industry, for example, in which 81 percent of the employees are female, the average weekly salary is only \$93. That is \$4,336 a year.

The service industry, the most female intensive of the major industry groups, with 55 percent of its workers women, employed 6.8 million women in January 1973. Earnings for this group averaged \$111 a week. Hospital workers average \$108 a week, and women in hotels, and laundries and drycleaners average \$76 and \$87 respectively per week. Another low-paying, female-intensive industry is retail general merchandise, where the average weekly wage is \$82. All of this is contrasted with those occupations which are male intensive. For example, in transportation equipment, which has only 10 percent female workers, the average earnings were \$210 a week, and in the malt liquor industry, which has 7 percent women, the average worker earned \$229 a week. Finally, compare in the public utilities the pay of switchboard operators, \$126 a week, with those of line construction employees, \$228 a week. The measure is clear: Women should seek and be encouraged to seek nontraditional jobs if they wish to secure higher incomes.

It is clear that current vocational education courses are not preparing women to do that. They are now concentrated in home economics, clerical training, health, and cosmetology.

As Ms. Marilyn Steele's report, "Women in Vocational Education" points out, girls are enrolled in only 38 wage-earning courses out of 136 instructional programs identified by the Office of Education.

This must be changed. Girls and women must be integrated into the vocational education courses traditionally offered to males. Conversely, the boys ought to be encouraged to enroll in predominantly female courses such as home economics and nursing.

With regard to home economics, the skills learned there are equally as important for men as well as women, and further emphasis in these courses upon consumer issues and things such as appliance repair and family planning would be very helpful. Everyone should know how to cook, sew, fix a light switch, replace a broken window-pane, fill out their tax forms, or apply for a bank loan. Further, women, especially young women, need to know what the job market is like. Many young girls think they are going to get married, settle down, and have children. What they don't realize is that they will probably have two jobs, one in the home and one in the marketplace. The two-parent working family is now the national norm. Young women might better understand the realities of adult life if the widow of a mineworker talked to them about what it is like to exist on food stamps and an inadequate pension.

Hearing about the following experiences would also be good for young women: A woman, recently separated from her husband, who could only find employment as a nurse's aide on the night shift at the hospital, couldn't find anyone to take care of her three small children because no 24-hour child care services exist; or a waitress who could tell them what it is like to be informed, as they are being

informed right now, "We are going to cut you back from 5 to 3 days a week."

There should also be special emphasis upon programs for women at the postsecondary level. This year marked the biggest increase in women aged 25 to 30 returning to school. There should be special courses with emphasis on nontraditional fields for these mature women.

Further, as women suffer greatly from underemployment as well as unemployment, women currently working in low-level jobs ought to be advised of these classes. Finally, women on welfare ought to be recruited for these programs. Seventy-three percent of all welfare recipients are women and children. Another 14.9 percent are aged, and 11.7 percent are blind or disabled. Only 0.09 percent are able-bodied fathers. Currently, the average starting wage for WIN women is \$1.87 an hour, a yearly wage of only \$3,740. These women are heads of households. They need a more adequate wage, or they will just end up back on the welfare rolls. Obviously, many of these women will need child care while they go to school.

Last year, Congress passed amendments which provided for bilingual vocational education. These programs should be reauthorized and the funds slashed by OMB for this purpose should be restored.

I have noticed that women and union members have very low representation on the State vocational education policy councils. Both have only 12 percent representation. I would encourage you to mandate participation on these boards by category, and that you enlarge the categories for both women and union members. I would also note that women should not be selected just because they are women. They should have some experience and expertise in the field of job training and employment. Activist women such as CLUW members or women such as the speakers here today would be good selections.

Finally, as I indicated at the outset, we are concerned about enforcement of existing laws. We can tell you that when Ma Bc!! was forced to pony up that backpay for women and minorities who had been discriminated against, it did more to raise industry's consciousness than any other single act. Right now, the following employment profile exists at the Office of Civil Rights which is charged with enforcing the sex discrimination amendments of the Education Amendments of 1972.

	Headquarters	Regional	Total
Professional.....	170	424	594
Clerical.....	96	157	253
Total.....	266	581	847

Let us be reasonable; 594 professionals and 253 clericals can't possibly handle all of the enforcement work required for school desegregation, the Lau V. Nichols oversight survey on bilingual education, and the enforcement of title IX. You must have tough enforcement, and that means you must increase that enforcement budget.

Thank you.

Mrs. CHISHOLM. Thank you very much, Ms. Perlman.

The last person on the panel is Dr. Joanne Steiger, president, Steiger, Fink & Smith, Inc.

Dr. STEIGER. Thank you very much, Congresswoman Chisholm and members of the committee.

I would like to thank the subcommittee for allowing me this opportunity to testify on a subject which has become a major concern of mine: Sex bias in vocational education. I have worked in the field of education for the past 10 years as a teacher, researcher, and administrator, and spent approximately the last 4 years in the specialties of vocational and career education. I was an intern with the Career Education Task Force in the Office of Education when the OE career education thrust was begun, and was a member of the staff of the National Advisory Council on Vocational Education for 2½ years.

I currently head my own education research firm and am devoting much of my attention to increasing education opportunities for women, particularly in vocational education.

Sex bias in vocational education is pervasive. The system consists almost entirely of separate boys' courses and girls' courses, in which enrollments are predominantly, usually entirely, of a single sex. Classes containing roughly equal enrollments of each sex are rare. Most of the women's programs, moreover, are built on the assumption that a woman will never have to, or never want to, earn a living. Nearly half the enrollments of women in vocational education programs are in nongainful home economics, a fine program in its place, but one that teaches no salable skills. The remaining female enrollments are almost exclusively in stereotypical female fields and lead only to low-paying, deadend jobs such as file clerk or nurse's aide. These enrollment patterns, and their consequences for women's earning power, are discussed in detail in a paper on this topic which I have appended to my testimony and which I would like to submit for the record, and I think those details have been covered magnificently by Dr. Steele here.

Women are workers. According to a survey by the U.S. Department of Labor last year, 46.3 percent of all women over the age of 16 are in the labor force, constituting 39.9 percent of all workers. Ninety percent of women work at some time in their lives. Furthermore, nearly two-thirds of women workers are single, divorced, widowed, separated, or have husbands who make less than \$7,000 per year, a point all three of us have made. Women are serious workers and their needs for vocational education must be taken seriously.

Because of historical cultural patterns, women who do work earn, on the average, much lower wages than men do. In 1973, the median earnings of men who worked full-time, year-round was \$11,166. The median earnings of women who worked full-time, year-round was \$6,335 or 56.6 percent of the male median.

A major contributor to the historical disparity in wages between men and women, beyond the simple failure to give equal pay for equal work, has been the tendency of women to cluster in a few low-wage occupations. Traditionally, very few jobs were open to women.

They could be teachers, nurses, secretaries, bookkeepers, and one or two other things, but were not allowed into the vast majority of jobs.

This is beginning to change. Antidiscrimination legislation and a growing awareness on the part of women that they can succeed at a wide variety of jobs beyond those traditionally deemed appropriate to their sex are contributing, albeit gradually, to the increasing employment of women in nontraditional fields such as management and the skilled trades.

Women cannot take advantage of the opportunities, however, if they come to the labor market without the necessary skills. Skilled women can now compete for good jobs, but women without salable skills are as lost as ever. And I am particularly concerned in this regard with those victims of double discrimination: Minority women. Every analysis of earnings I have ever seen, which breaks down earnings by race and sex, shows the same pattern: White men on top, minority men second, white women third, and minority women absolutely last.

The vocational education system should be helping to eliminate past inequities by providing equal opportunity for job training in all fields to both sexes. Alas, this is not the case. Many, very many, vocational educators do not even take the training needs of women seriously.

During my work for the National Advisory Council on Vocational Education, I was dismayed to find that many vocational educators, including some of the most influential ones, regard the vocational and technical needs of women as inconsequential. Some refuse to concede there is any problem. Others view the matter as one of lowest priority.

I was told at one point by a very influential vocational educator in this country the following: "After we solve the problems of the handicapped and minorities and students in rural areas and other special needs groups," he said, "then we can look at training for women."

The problem, I believe, is not one of ill will. It is a simple, total lack of awareness. These men—and they are, almost without exception, all men—do not know about the labor market participation rates of women. They do not know about antidiscrimination legislation. They have never heard of title IX. I am not making that up. It is true. Even though that law was passed in the summer of 1972, there are people who do not know it exists, and many people who are running schools do not know it is illegal to have single sex schools. OCR has identified at least 17 on their first just preliminary runover of vocational education schools which are exclusively restricted to one sex, the whole school. They haven't even looked into the millions of courses where the schools absolutely keep women from enrolling in programs.

There is a need for a major effort to inform the State and local authorities and officials, teachers, counselors, school administrators, parents, and young people about the facts concerning women and work.

There are several steps that I believe the Congress can take in the course of revising the Vocational Education Amendments of 1968 which will address this problem.

That act represented a major step forward. It has helped bring improved vocational education to increasing numbers of Americans, but nowhere does it mention the special needs of women or address the issue of sex bias. I believe the time has come when these issues must be addressed explicitly.

Specifically, I suggest the following changes:

#### 1. DECLARATION OF PURPOSE

A specific statement should be added to this section declaring that it is the purpose of this act to provide vocational education opportunities to both sexes equally.

#### 2. STATE PLANS

States should be required to include in their State plans an incentive program for local school districts to encourage the schools to overcome sex bias in vocational education. Five percent of part B funds should be set aside for this purpose. Each State could then design the type of incentive system which is most likely to be effective in that State, be it flat grants, matching funds, special projects, or some other system. I feel it is very important to work through the State plans, so long as the committee is going to retain that structure of vocational education, because the key way to make any changes in the system is to work through that system, and that system is dependent on the State plans, so the changes must be in the State plans and not in some peripheral area like just in the research fund category. It must be right there in part B funds if it is going to have any real impact on the system.

#### 3. SPECIAL OFFICE

100 percent Federal funding should be provided to States to establish an Office of Women and Work within the State Departments of Vocational Education.

This office would have three purposes: To serve as a contact point for local education agencies and others in the State interested in improving vocational educational opportunities for women; to coordinate the efforts of the State Departments of Vocational Education in this field with those of other State and local agencies such as Labor Department and Human Resources agencies; and to act as a voice within the State Department of Vocational Education for the needs of women.

Once again, I feel it is crucial to begin at the State Department of Vocational Education to have any real impact on the system.

#### 4. NATIONAL AND STATE ADVISORY COUNCILS ON VOCATIONAL EDUCATION

Section 104 lists a variety of special groups which must be represented on the National Advisory Council and the State Advisory Council.

Language requiring the appointment of "persons familiar with the vocational preparation needs of women and the problems of sex bias in employment and training" should be added to this list.

## 5. CONSUMER AND HOMEMAKING EDUCATION

This section should be amended to require that courses be designed to attract students of both sexes. Consumer and Homemaking programs could be combined with industrial arts programs to provide a comprehensive Basic Life Skills curriculum. However, data on such programs should be kept separate from data on programs designed to provide training for jobs. Combining the data can lead to erroneous analysis of such factors as enrollment and cost.

I know this whole issue of including home economics in the vocational education bill is a controversial one and there are arguments on both sides. I would hate to see the whole issue of overcoming sex bias and sex discrimination in voc ed get brought down by debate over whether the homemaking subsidy should be part of the voc ed bill or part of the ESEA bill.

I think consumer education programs or skills programs are crucially important. They should receive some Federal funds. It is not terribly important to me which bill they come under. It is terribly important to a lot of people in the field because they are used to getting their money through this bill.

I don't think there would be any problems with it, so long as it is clear from the bill, and it is clear in the records that are kept on the enrollments, that these are nongainful courses and these enrollments are not carried as part of the skilled training enrollments. are not carried as part of the skilled training enrollments.

## 6. DATA—THE WHOLE ISSUE OF DATA COLLECTION

Until 1972 all enrollment data on vocational education programs were collected by sex. This practice was stopped just as sex discrimination became illegal. You cannot now get enrollment breakdowns by sex in the U.S. Office of Education voc ed programs. They just stopped collecting the numbers when the Federal Government stopped requiring the collection by sex. Most of the States stopped doing it too, although I think five States—eight maybe—still have those numbers. Most of them do not have them.

Therefore, when you go in to talk to a State director and you have 1972 numbers, he will quite frequently say: "Well, it has changed since 1972." As far as I can tell, things haven't changed since 1972, but it certainly would be better to have up-to-date statistics. It is not that difficult for them to collect them, and I think it should be mandated in the legislation that all those enrollment data be collected by sex, sex and race preferably, because I would also like to be able to track the question of minority enrollment problems.

The following legislation closely related to the Vocational Education Amendments of 1968 should also be revised:

### THE EDUCATION PROFESSIONS DEVELOPMENT ACT, PART F

This legislation was created to encourage the preparation of leaders in vocational education. The leadership in vocational education at this time is almost 100 percent male. Specific affirmative action requirements should be added to Education Professions Development

Act, part F, so that women are recruited and trained to assume leadership positions in the field.

THE EDUCATION AMENDMENTS OF 1972, TITLE X, PART B

One: Planning Activities for Infusing Occupational Education into the Elementary and Secondary Schools. The legislation should mandate that career awareness and career exploration programs be free of sex bias.

An as yet unpublished study, funded by the National Institute of Education, found sex stereotyping of jobs to be rampant in career education materials now being distributed to schools. The materials invited boys' interest in twice as many job categories, on the average, as they presented as being available to girls.

Only 1 percent of the job categories were explicitly listed as being open to both sexes. The materials examined were not relics from a less bias-conscious time. The earliest copyright was 1971.

Two: State Planning Commission. Section 1056(b)(2) lists a variety of groups which must be represented on the State Planning Commission. Language should be added to require the appointment of "persons familiar with the vocational preparation needs of women and with the problems of sex bias in employment and training."

And I would like to repeat a comment that was made by my colleagues here, that just appointing women to these commissions does not deal with this problem. Historically, the women who have been appointed to many of these commissions were appointed because their families were major contributors to political campaigns who usually were full-time homemakers. They are wonderful women. Some of them have done great things, but they have no concept of the needs of working women and they have no understanding at all of the problems of sex bias in employment.

So, when appointments are made, those appointments must be made to people who are knowledgeable in these areas, not just people who happen to be female.

Three: Technical Assistance. Title X, part B, provides authorization for the Commissioner of Education to provide technical assistance to States and to offer incentive grants to encourage the States to implement programs to meet special needs. Leadership in overcoming sex bias in vocational education could be provided by the Commissioner of Education using both of these techniques, were it made sufficiently clear that solving this problem is a priority of the legislation. And I think that is the single most crucial element, that the Congress make it clear to the people in the field that sex bias will not be tolerated, that it is a priority, and that funds will be provided to help them in overcoming these historical problems.

Thank you very much.

[Material referred to by Dr. Steiger follows:]

VOCATIONAL PREPARATION FOR WOMEN: A CRITICAL ANALYSIS

(By JoAnn M. Steiger, Ed.D.)

INTRODUCTION

Women are joining the labor force in increasing numbers and their career opportunities are expanding, but the education system has failed to respond.

Women are still encouraged by the schools to prepare solely for the role of homemaker or for dead end, low paying jobs in traditionally female occupations.

Almost all women in the United States work for pay at some time in their lives, and about half the female population is employed at any one time. The main factor that seems to prevent women from working, the presence of young children at home, is being reduced in two ways: women are having fewer children, and women with young children are more willing to work.

At the same time, the factor which most increases the likelihood that a woman will be employed at some time in her life, the amount of her education, is steadily increasing. Taken together, these trends seem to indicate that more than half the women will be employed in the future.

Women have traditionally been employed in just a few, low paying jobs. Over a quarter of all women are employed in just five occupations: secretary, public elementary school teacher, retail sales clerk, bookkeeper and waitress. In all occupations, women are paid less than men. But this is changing. Equal rights legislation passed during the last decade is beginning to have effect as the government, women's groups, and individual women press for enforcement. Major business firms have recently been forced to pay millions in back pay and wage adjustment settlements and change company policies to provide equal pay and equal opportunities to women workers.

Thus women seeking careers now and in the future face a different market, with many more opportunities, than their mothers faced. Most of their best opportunities will be in fields that have traditionally been considered male fields. for the fact is that women who work in fields that predominantly employ males are paid substantially more than are women who work in fields that predominantly employ women.

The basic socialization forces in our society push women into a highly restricted vision of their role, including a very narrow range of occupations which are considered appropriately "feminine." These beliefs serve to continue to channel women into low-status, low-pay occupations at a time when they can do much better.

Schools are charged with preparing students realistically for their futures. In order to prepare women for their current role, which includes employment, the schools should be acting to counter some of the socialization patterns which prevent girls from acquiring the job training that would do them the most good as adults.

At present, the opposite tends to be the case. The schools heavily reinforce the traditional sex role stereotypes in course offerings, curriculum materials, guidance and counseling programs, and other aspects of school life. The result can be seen in looking at the enrollment patterns of women in vocational education programs. Nationwide, half of all women enrolled in vocational education are in homemaking courses, another 30% are in office occupations, and another 14% are in other traditionally female fields. Only 8% are receiving training in traditionally male fields, the fields which, on the average, offer women the best opportunities. Analogous sex stereotyped enrollment patterns are found in post-secondary technical schools and in four year colleges.

Clearly, the schools are not preparing women for the real world. Substantial changes are needed. In order to have real impact on this problem the schools must both change current practices which discriminate by sex—many of which are now illegal under the provisions of Title IX of the Education Amendments of 1972—and also undertake positive efforts to provide realistic information to students and faculty about the changing career patterns of women in the United States.

The following paper substantiates these generalizations, analyzes the issues and presents recommendations for changes in the educational system to make it more responsive to the real needs of women students.

#### I. WOMEN AND THE LABOR FORCE

More and more women are joining the labor force. In 1948, 32.7% of adult women (16 years old or older) were either employed or actively seeking work. The percentage has increased steadily since that year and by November 1974,

<sup>1</sup> Executive Office of the President: Office of Management and Budget, *Social Indicators*, 1973. U.S. Government Printing Office, Washington, D.C., p. 140. And, U.S. Department of Labor, Bureau of Labor Statistics, unpublished figures, November 1974.

46.5% of adult women were in this category.<sup>1</sup> As of that month, women constituted 39.9% of the labor force.<sup>2</sup>

These changes in the behavior of women appear even more striking if we break down the employment trends by presence of children. Women at all stages of their lives are working more now than they did 25 years ago, but the greatest change is among women with young children.

Women with no children under 18 years of age increased their participation in the labor force from 31.4% in 1950 to 45.7% in 1974, a rise of 45.5% in the percentage working. At the same time, women with children aged 6-17 years increased their participation in the labor force from 32.8% in 1950 to 53.8% in 1974, a rise of 64%. The percentage of women with children under 6 years old who worked rose from 13.6% in 1950 to 36.6% in 1974, a rise of 169%.<sup>3</sup>

A woman with pre-school children at home in 1974 was more likely to be working than was a woman in 1950 who had no children under 18.

The evidence seems strong that the trend toward women's increased participation in the labor force will continue. Not only are women less deterred from working by the presence of children than they used to be, but they are having fewer children.

The crude birth rate (number of children born per year per 1000 population) has dropped from 25.3 in 1957 to 14.8 in 1974. At the current fertility rate, the average family size of women now of childbearing age will be 1.8 children. The lowest it has ever been before in the United States, during the depression of the 1930's, was 2.2.<sup>4</sup>

The working patterns of women are historically related to family size. The fewer children a woman has, the more years she tends to work outside the home.<sup>5</sup>

Thus the demographic trends would seem to indicate that women will be spending even more years of their lives in the labor force in the future than they are at present.

Another social change contributing to the continuing increase in the percentage of women employed is the rising education level. The more highly educated a woman is, the more likely she is to work. Seventy-five percent of women aged 20-54 with only a grade school education have worked at some time in their lives. Eighty-five percent of women who attended high school but did not graduate have worked. Ninety percent of women high school graduates who did not attend college have worked. Ninety-three percent of those who attended college and ninety-six percent of college graduates have worked.<sup>6</sup> In fact, ever having worked is more closely correlated with education than it is with age, number of children, family income or any other variable associated with current employment status. This probably reflects a difference in employability. More highly educated women can, in general, get better jobs and therefore employment is more attractive to them.

The percentage of women aged 18-24 enrolled in college has grown from 7.1% in 1950 to 19.6% in 1972. The percentage of all women over 25 years of age having four or more years of college education has risen from 5% in 1950 to 9% in 1972. Among women aged 25-29, the number holding a college degree has risen from 5.8% in 1950 to 18% in 1972.<sup>7</sup> The trend is expected to continue. According to Department of Labor projections, by 1980 the percentage of women over 25 who are college graduates will be 15.3%. A similar trend is will be high school graduates, up from 22.6% in 1950 and 34.1% in 1970.<sup>8</sup>

### *Sex Equality in Employment in Mandated by Law*

Women historically have been limited to certain kinds of jobs and have been paid less than men for the same work. In 1970 the average earnings of men was \$9,030. The average for women was \$4,873. When differences between the sexes in hours worked (accounting for \$575.06 of the earnings disparity)

<sup>1</sup> U.S. Department of Labor, Bureau of Labor Statistics, unpublished figures, November 1974.

<sup>2</sup> Based on figures from Executive Office of the President: Office of Management and Budget, *op. cit.*, p. 142, and U.S. Department of Labor, Bureau of Labor Statistics, unpublished report, March 1974.

<sup>3</sup> Lawrence A. Mayer, "It's a Bear Market for Babies, Too," *Fortune* (December 1974) Vol. XC, No. 6, p. 135.

<sup>4</sup> James A. Sweet, *Women in the Labor Force*. New York: Seminar Press, 1973, pp. 89-103.

<sup>5</sup> *Ibid.*, p. 14.

<sup>6</sup> Executive Office of the President: Office of Management and Budget, *Op. cit.*, pp. 105-107.

<sup>7</sup> Manpower Administration: U.S. Department of Labor, *Op. cit.*, p. 105.

education (accounting for \$360), job seniority (\$360), and absenteeism (\$8) are considered, \$2,854, or 68.7% of the disparity, remains unexplained.<sup>\*</sup>

Women who have worked full time every year since leaving school earn about 75% as much as men. (Women who have worked only half the years since leaving school earn, when they work, only 23% as much as men.)<sup>10</sup> Women are paid less than men in every job category, and women tend to be concentrated in the lowest paying jobs.<sup>11</sup>

However, legislation now requires that these discriminatory practices end, and these laws are being used with increasing impact.

The Equal Pay Act of 1963 prohibits discriminations on the basis of sex in payment of wages for equal work on jobs that require equal skill, effort, and responsibility and are performed under similar working conditions. In July 1972 this protection was extended to executive, administrative, and professional employees and to outside sales personnel. In the landmark court decision of *Shultz v. Wheaton Glass*<sup>12</sup> the principle was established that the jobs need be only "substantially" equal to fall under the provisions of this law. That is, employers cannot evade this law by introducing trivial differences between the men's and women's jobs.

Title VII of the Civil Rights Act of 1964 prohibits discrimination in employment based on sex, race, color, religion, and national origin. A 1972 amendment extended coverage to state and local government agencies and public and private schools. Discrimination is forbidden in hiring or firing; wages; fringe benefits; classifying, referring, assigning, or promoting employees, extending or assigning use of facilities, training, or any terms, conditions, or privileges of employment.

The guidelines issued by the Equal Employment Opportunity Commission (EEOC), charged with enforcing Title VII, state that this law supersedes any state "protective" laws which prohibit women from working in certain kinds of jobs or for more than certain hours. The guidelines also bar classifying jobs as "men's jobs" and "women's jobs," and restrict exemptions to a very narrow definition of bona fide occupational qualification (such as, only men can be sperm donors and only women can be wet nurses).

The Equal Pay Act and Title VII were the basis of Government action against the American Telephone and Telegraph Company alleging discrimination which resulted in landmark settlements. In January 1973, AT&T agreed to a settlement requiring \$45 million in back pay and wage adjustments to nonmanagement employees and in May, 1974, the company agreed to a settlement requiring \$30 million in back pay and wage adjustments to management employees.<sup>13</sup>

Executive Order 11246, (effective September 24, 1965) which required that all government contracts include provisions forbidding the contractor to discriminate on the basis of race, color, religion or national origin, was amended by Executive Order 11875 in 1967 to include a ban on sex discrimination. In 1971 the Secretary of Labor and the Director of the Office of Federal Contract Compliance revised regulations to require affirmative action goals and timetables for increasing the representation of women in job categories in which they were underrepresented.

Sex discrimination in educational institutions was addressed directly in Title IX of the Education Amendments of 1972. This law states that "no persons in the United States shall, on the basis of sex, be excluded from participating in, be denied the benefits of, or subjected to discrimination under any education program or activity receiving Federal financial assistance. . . ."<sup>14</sup>

These laws provide a framework for eliminating sex discrimination in employment. As women seek employment in increasing numbers and as they become more aware of their rights, we can expect to see more and more employers forced to ensure that their policies grant equal opportunities to women.

\* Robert Tsuchingane and Norton Dodge, *Economic Discrimination Against Women in the United States*. Lexington, Mass.: Lexington Books, 1974, p. 38.

<sup>10</sup> Larry E. Suter and Herman P. Miller, "Income Differences between Men and Career Women," in Joan Huber, Ed., *Changing Women in a Changing Society*. Chicago: University of Chicago Press, 1973, p. 205.

<sup>11</sup> Dixie Sommers, "Occupational Rankings for Men and Women by Earnings," *Monthly Labor Review* (August 1974) Vol. 97, No. 8, pp. 47-48.

<sup>12</sup> *Shultz v. Wheaton Glass Co.*, 421 F. 2D 250 (1970).

<sup>13</sup> Elleen Shinnahan, "A. T. & T. Ends Pay Inequity for Managerial Employees," *New York Times*, May 31, 1974, p. 1.

<sup>14</sup> Public Law 92-318, section 901.

education (accounting for \$360), job seniority (\$360), and absenteeism (\$8) are considered, \$2,854, or 68.7% of the disparity, remains unexplained.<sup>9</sup>

Women who have worked full time every year since leaving school earn about 75% as much as men. (Women who have worked only half the years since leaving school earn, when they work, only 23% as much as men.)<sup>10</sup> Women are paid less than men in every job category, and women tend to be concentrated in the lowest paying jobs.<sup>11</sup>

However, legislation now requires that these discriminatory practices end, and these laws are being used with increasing impact.

The Equal Pay Act of 1963 prohibits discriminations on the basis of sex in payment of wages for equal work on jobs that require equal skill, effort, and responsibility and are performed under similar working conditions. In July 1972 this protection was extended to executive, administrative, and professional employees and to outside sales personnel. In the landmark court decision of *Shultz v. Wheaton Glass*<sup>12</sup> the principle was established that the jobs need be only "substantially" equal to fall under the provisions of this law. That is, employers cannot evade this law by introducing trivial differences between the men's and women's jobs.

Title VII of the Civil Rights Act of 1964 prohibits discrimination in employment based on sex, race, color, religion, and national origin. A 1972 amendment extended coverage to state and local government agencies and public and private schools. Discrimination is forbidden in hiring or firing; wages, fringe benefits, classifying, referring, assigning, or promoting employees, extending or assigning use of facilities, training, or any terms, conditions, or privileges of employment.

The guidelines issued by the Equal Employment Opportunity Commission (EEOC), charged with enforcing Title VII, state that this law supersedes any state "protective" laws which prohibit women from working in certain kinds of jobs or for more than certain hours. The guidelines also bar classifying jobs as "men's jobs" and "women's jobs," and restrict exemptions to a very narrow definition of bona fide occupational qualification (such as, only men can be sperm donors and only women can be wet purses).

The Equal Pay Act and Title VII were the basis of Government action against the American Telephone and Telegraph Company alleging discrimination which resulted in landmark settlements. In January 1973, AT&T agreed to a settlement requiring \$45 million in back pay and wage adjustments to nonmanagement employees and in May, 1974, the company agreed to a settlement requiring \$30 million in back pay and wage adjustments to management employees.<sup>13</sup>

Executive Order 11246, (effective September 24, 1965) which required that all government contracts include provisions forbidding the contractor to discriminate on the basis of race, color, religion or national origin, was amended by Executive Order 11375 in 1967 to include a ban on sex discrimination. In 1971 the Secretary of Labor and the Director of the Office of Federal Contract Compliance revised regulations to require affirmative action goals and timetables for increasing the representation of women in job categories in which they were underrepresented.

Sex discrimination in educational institutions was addressed directly in Title IX of the Education Amendments of 1972. This law states that "no persons in the United States shall, on the basis of sex, be excluded from participating in, be denied the benefits of, or subjected to discrimination under any education program or activity receiving Federal financial assistance. . . ."<sup>14</sup>

These laws provide a framework for eliminating sex discrimination in employment. As women seek employment in increasing numbers and as they become more aware of their rights, we can expect to see more and more employers forced to ensure that their policies grant equal opportunities to women.

<sup>9</sup> Robert Tsuchingane and Norton Dodge, *Economic Discrimination Against Women in the United States*, Lexington, Mass.: Lexington Books, 1974, p. 38.

<sup>10</sup> Larry E. Suter and Herman P. Miller, *Income Differences between Men and Career Women*, in Joan Huber, Ed., *Changing Women in a Changing Society*, Chicago: University of Chicago Press, 1973, p. 205.

<sup>11</sup> Dixie Sommers, "Occupational Rankings for Men and Women by Earnings," *Monthly Labor Review* (August 1974) Vol. 97, No. 8, pp. 47-48.

<sup>12</sup> *Shultz v. Wheaton Glass Co.*, 421 F. 2D 250 (1970).

<sup>13</sup> Ellen Shanahan, "A. T. & T. Ends Pay Inequity for Managerial Employees," *New York Times*, May 31, 1974, p. 1.

<sup>14</sup> Public Law 92-318, section 901.

### *Employment Opportunities Through 1985 Are Mixed*

Projecting labor market trends is a delicate business at best. Future job openings depend on so many factors beyond our control, that one can only make a best guess based on trends in the economy visible at the moment. Yet it is a useful exercise to see what the labor market will look like in 1980 or 1985 if currently foreseeable trends continue. The following is a brief discussion of 1974 Department of Labor projections.

Between 1974 and 1985, employment is expected to expand in all fields except household work and farm labor. The most rapid rate of increase will be among professional and technical workers. A larger percentage of workers will be in white collar jobs (47.8% in 1972, 51.5% in 1980, 52.9% in 1985). The rise in white collar jobs is accounted for by the rise in the professional, technical and clerical workforce. The proportion of workers employed as managers, administrators or sales workers is expected to remain about the same.<sup>12</sup>

The expansion of employment, however, will not keep pace with the increased supply of workers looking for white collar jobs. The Department of Labor has made the following projections of growth in the supply and demand for jobs:<sup>13</sup>

TABLE 1—COMPARISON OF PROJECTED PERCENTAGE INCREASES IN LABOR FORCE AND EMPLOYMENT BY OCCUPATIONAL STATUS GROUP, 1970 TO 1980

Occupational status group	Labor force increase (1)	Employment increase (2)	Difference (1)-(2)
Group I, professional, technical, and kindred.....	45.3	39.0	6.3
Group II, managerial, clerical, and sales <sup>1</sup> .....	24.6	21.9	2.7
Group III, craft and kindred (part of) <sup>2</sup> .....	15.1	16.5	-1.4
Group IV, operatives (part of) <sup>3</sup> .....	11.0	16.9	-5.9
Group V, laborers (part of) <sup>4</sup> .....	4.4	10.6	-6.2

<sup>1</sup> Also includes police, fire fighters, and related occupations. Does not include shipping and receiving clerks, messengers, and office helpers.

<sup>2</sup> Includes farmers; operatives in selected higher wage industries, e.g., transportation equipment, chemical, and petroleum; and barbers, bartenders, and practical nurses.

<sup>3</sup> Includes auto mechanics, construction painters, plasterers, cement and concrete finishers, and roofers, selected service occupations, e.g., hospital attendants, waiters, guards, and housekeepers, metalworking industry laborers and shipping and receiving clerks, messengers, and office helpers.

<sup>4</sup> Includes most farm and nonfarm laborers, cooks and kitchen workers, cleaning and building service workers, domestic workers, and laundry and dry cleaning operatives.

There will be a 39% increase in professional and technical jobs, but simultaneously there will be a growth of 45.3% in the number of people seeking those jobs. Likewise, there will be more people seeking managerial, clerical and sales jobs than there will be openings.

However, the situation is the reverse for craft workers. Employment will increase 16.5% while the number of people seeking such jobs will increase only 15.1%. Likewise, the openings for operatives will exceed the supply of workers by a significant amount, and the same holds true for laborers.

Thus people looking for jobs through 1985 should consider craft and industrial jobs, for that is where there will be openings in excess of supply. There will also be expanded employment in managerial, clerical and sales work, but the increased supply will exceed the demand.

#### *Women Should Expand Their Career Horizons*

The labor market projections seem to indicate that women preparing for employment would do well to look beyond traditional "women's jobs" and consider the opportunities in previously male fields.

This conclusion is reinforced when we consider the relative wage rates in different fields. The fact is, women who work in fields that are predominantly male earn considerably more money than do women who work in fields that are predominantly female.

The combined effects of discrimination and socialization have caused women to be concentrated in a few, low paying fields. In 1970, half of all women

<sup>12</sup> Manpower Administration: U.S. Department of Labor, *op. cit.*, p. 109.

<sup>13</sup> *Ibid.*, p. 111.

workers were concentrated in just 17 occupations, while one needed 63 occupations to include half of all male workers.<sup>17</sup>

The five largest occupations for women are secretary, sales clerk in retail store, bookkeeper, public elementary school teacher and waitress. These fields employ 25.4% of all women workers. (The five largest occupations for men—operative, foreman, truck driver, farmer and janitor—employ only 14.4% of all male workers.)<sup>18</sup>

Although women, in their most typical jobs, have a higher level of education than men in their most typical jobs, women have substantially lower earnings. Consider the following table of the median annual earnings and median school years completed of women in each of the most popular female occupations in 1969:<sup>19</sup>

TABLE II.—WOMEN'S ANNUAL EARNINGS AND MEDIAN SCHOOL YEARS COMPLETED IN EACH OF THE MOST POPULAR FEMALE OCCUPATIONS IN 1969

	Earnings	Years of school completed
Public elementary school teachers.....	\$6,283	16.6
Secretaries.....	4,803	12.7
Bookkeepers.....	4,477	12.5
Sales clerks, retail trade.....	2,208	12.2
Waitresses.....	1,662	11.5

Compare these figures with the equivalent information on men employed in typical male occupations in 1969:<sup>20</sup>

TABLE III.—MEN'S MEDIAN ANNUAL EARNINGS AND MEDIAN SCHOOL YEARS COMPLETED IN EACH OF THE MOST POPULAR MALE OCCUPATIONS IN 1969

	Median annual earnings	Median years of school completed
Foremen.....	\$10,019	12.2
Truck drivers.....	7,245	10.5
Operatives.....	6,896	11.3
Farmers.....	4,816	10.7
Janitors.....	4,771	9.9

Women who have been able to break out of the bounds of the traditionally female occupations have been able to achieve substantially higher earnings. A 1974 analysis of the wages received by men and women in all occupations revealed that women who work in predominantly male occupations earn more than women in occupations that are predominantly female. Most of the top paying jobs for women have fewer than 10 percent female workers. At the same time, more than 20% of the occupations with 40% or more female workers pay women less than \$2,200 per year, putting them in the bottom decile of female workers.<sup>21</sup>

Thus, for example, in 1969 women railroad and car shop mechanics (a field 99% male) had median annual earnings of \$7,230 while women medical secretaries (a field 99% female) had median annual earnings of \$4,701.

## II. PREPARING WOMEN FOR EMPLOYMENT

Labor market projections and analysis of comparative wage rates indicate that women should consider preparing for a wider range of occupations than they have sought in the past. Higher earnings in traditionally male fields, combined with the expanding enforcement of anti-discrimination legislation, make these fields increasingly attractive.

Yet, at all levels, female students are continuing to enter education programs which either do not prepare them for employment at all or which prepare them only for work in traditional, low paying "female jobs."

<sup>17</sup> *Ibid.*, p. 107.

<sup>18</sup> Sommers, *op. cit.* p. 51.

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

<sup>21</sup> *Ibid.* p. 50.

### Enrollments in Vocational Education Programs Follow Traditional Sex Role Lines

In 1972, the last year in which data on enrollments in vocational education by sex were collected, women constituted a little more than half of all vocational education students nationwide.<sup>22</sup> However, an analysis of these data reveals that 49.5% of the women students were enrolled in homemaking and consumer education course not intended to prepare them for employment.<sup>23</sup> Thus, nearly half of the women who on paper were training for jobs, in fact were not. Since 90% of all women seek paid employment at some time in their lives, this seems to indicate a serious discrepancy between schooling and the real world.

Most of the remaining female vocational education students were enrolled in programs in traditional female fields. Table IV<sup>24</sup> shows the percentage of female and male vocational education students enrolled in each of the major categories of vocational education courses in 1972, nationwide and in Illinois. (There may well have been some significant progress in realigning enrollments since 1972, however lack of more recent data prevents analysis of later trends).

TABLE IV—PERCENTAGE OF TOTAL VOCATIONAL EDUCATION ENROLLMENT OF EACH SEX ENROLLED IN VOCATIONAL FIELD OF STUDY, NATIONWIDE AND IN ILLINOIS, 1972

Field of study	Male enrollment nationwide	Male enrollment Illinois	Female enrollment nationwide	Female enrollment Illinois
Agriculture.....	18.8	9.0	0.8	0.6
Distributive.....	7.8	4.4	4.9	3.5
Homemaking and consumer.....	5.5	1.3	49.5	2.9
Gained home economics.....	0.9	1.1	4.1	16.6
Office.....	12.3	22.5	30.5	57.4
Technical.....	6.7	3.6	0.6	0.6
Trade and industrial.....	46.9	57.3	4.8	7.0
Health.....	1.1	0.9	4.8	5.3
Total.....	100.0	100.0	100.0	100.0

<sup>1</sup> Columns may not add to 100 percent because of rounding.

The second most popular vocational education program (after homemaking) among female students nationwide (30.5%), and the first choice for females in Illinois (57.4%) is office occupations.

In Illinois the second choice is occupational home economics (16.6% of female students). This compares to only 4.1% nationwide. (The high percentage enrolled in occupational home economics in Illinois and the extremely low percentage enrolled in consumer and homemaking (8.9%) is due to the distinctive funding and definitional policies of the Illinois Division of Vocational and Technical Education. As part of a policy to encourage occupational preparation, the Illinois DVTE considers occupational home economics as a vocational education program but supports consumer and homemaking only on a course by course basis.)

If the traditional female fields of homemaking, home economics and office occupations are taken together, they account for 84.1% of female enrollments in vocational education nationwide and 82.9% of the female vocational education enrollments in Illinois.

Trade and industrial and technical education courses train students in fields for which the employment prospects are bright and the wages, in general, are favorable. Together these courses accounted for 53.6% of all male vocational education enrollments nationwide and 60.9% of male enrollments in Illinois. They enroll very few women. Nationwide, 4.8% of women in vocational education were in trade and industrial education programs and 0.6% were in tech-

<sup>22</sup> U.S. Department of Health Education and Welfare, Office of Education, Division of Vocational and Technical Education, *Vocational and Technical Education, Selected Statistical Tables, 1972*. U.S. Government Printing Office, 1972, p. 31.

<sup>23</sup> *Ibid.* p. 34-41.

<sup>24</sup> *Ibid.* The percentages were computed by adding the number of male or female students enrolled in each type of program and comparing the number in each field with the total obtained. This total is a slightly different figure from that given by USOE as the "total enrollment in vocational education" (p. 31) because the latter figure includes enrollments for special programs.

nical programs. The figures for women in Illinois were 7.0% and 0.6% respectively.

Table V\* shows the percentage women form of the enrollments in each field. Nationwide, the enrollment in trade and industrial programs is 88.3% male and 11.7% female. In Illinois these programs are 90.4% male and 9.6% female.

Nationwide, technical programs are 90.2% male and 9.8% female. In Illinois, technical programs are 87.4% male and 12.6% female.

TABLE V.—ENROLLMENT TOTAL AND PERCENTAGE FEMALE ENROLLMENT IN EACH VOCATIONAL FIELD OF STUDY, NATIONWIDE AND IN ILLINOIS, 1972

Field of study	Enrollment nationwide	Female nationwide	Enrollment Illinois	Female Illinois
Agriculture.....	896,460	5.4	30,335	5.5
Distributive.....	640,423	45.3	23,808	40.7
Health.....	336,652	24.7	17,682	32.9
Homemaking and consumer.....	3,165,732	92.1	28,572	85.8
Gainful home economics.....	279,966	86.1	49,169	93.1
Office.....	2,351,878	76.4	230,303	68.8
Technical.....	337,069	9.8	13,248	12.6
Trade and industrial.....	2,397,968	11.	202,762	9.6

### Post-secondary Enrollments Follow Traditional Sex Role Lines

Women who choose to pursue career training in community colleges, post-secondary technical institutes and area vocational technical schools are investing time and money in improving their employability. Yet this subset of women (about 11 percent of vocational education enrollments nationwide) shows the same pattern of anachronistic and self-defeating sex-stereotyped enrollments as the larger group. For example, in 1971 women were 86.5% of the post-secondary students studying to be key punch operators but there were no women reported studying data-processing equipment maintenance. The enrollment in dental hygiene was 99.3% female while the enrollment in electronics and machine technologies was 99.7% male.\*

Women who attend four year colleges also tend to restrict themselves to traditionally female career areas. A recent study\*\* of 1646 women who were juniors and seniors in college found only 109 who were studying for careers in fields not traditionally considered female. Their choice of occupations is seen in Table VI.

TABLE VI.—CAREER CHOICES OF WOMEN COLLEGE STUDENTS

Career	Number of students	Percent of all students
<b>Traditional:</b>		
Teacher.....	803	48.8
Counselor, social worker.....	94	5.7
Nurse or other health.....	77	4.7
Librarian.....	23	1.7
Housewife.....	10	.6
Other traditional.....	211	12.8
<b>Total.....</b>	<b>1,223</b>	<b>74.3</b>
<b>Nontraditional:</b>		
Scientist.....	20	1.2
Clinical psychologist.....	15	.9
Physician.....	14	.9
Lawyer.....	11	.7
Government.....	10	.6
Computers.....	7	.4
Others.....	32	1.94
<b>Total.....</b>	<b>109</b>	<b>6.54</b>
Don't know.....	314	19.

\* Ibid.

\*\* Marilyn Steel, *Women in Vocational Education. Supplementary Report to Learning a Living Across the Nation. Project Baseline, Third National Report (Fiscal Year 1972)* Flagstaff, Arizona: Northern Arizona University, In Press.

\*\* Karman, Felice J. "Women: Personal and Environmental Factors in Career Choice." Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, La., Feb. 1978.

In this sample, 74.3% of the women students were planning on careers in traditional fields and only 6.54% were venturing outside, and some of those were not going very far. If we add together the "don't know's", the housewives, and the teachers (many of whom, given the current and projected oversupply of teachers, will not be able to find teaching jobs) we account for 71.6% of the students. If and when these women try to find jobs, and the odds are most of them will seek jobs at some point, they are likely to be sorely disappointed at what they find.

Thus it seems that the education system is not preparing female students realistically for the lives they are likely to lead. Adult women are increasingly seeking paid employment, but adolescent girls are still choosing courses which either do not prepare them for paid employment at all, or prepare them to work only at low status, low pay jobs.

Why this is so and what can be done to change it is the focus of the next part of this paper.

### III. COUNTERPRODUCTIVE INFLUENCES ON WOMEN'S CAREER ASPIRATIONS

Many adolescents hold traditional, outdated beliefs about women. A recent survey of high school seniors found that 22.6% of the girls and 38.9% of the boys believed that "Most girls will become housewives and never work outside the home." Oblivious to changing employment patterns and legal requirements, 29.4% of the girls and 45% of the boys believed that "Women should stick to women's jobs and not compete with men."

It is not surprising that adolescent boys and girls, just beginning to come to terms with their sex roles, should reflect outdated stereotypes. After all, that is still the surface information that the culture purveys.

Parents begin treating the sexes differently from the day of birth. Boys and girls are dressed differently and taught different games. The girls are given dolls and toy ovens and groomed for domestic life while the boys are given toy trucks and tool chests and encouraged to dream of adventurous careers. Television, movies and story books reinforce the stereotypes and rarely, if ever, show women in nontraditional careers.

An extensive literature has grown up documenting the ways in which our culture restricts the career aspirations of women. Girls are taught that most careers are "unfeminine" and that women should not expect to have a serious career at all. The message of the culture is that the only roles a woman need prepare for are those of wife and mother. At the same time, boys are growing up believing that their wives will not work outside the home.

One would think that the schools, institutions charged with preparing children for adult life, would provide realistic information to counter those influences. Actually, the schools sometimes act indirectly to reinforce the stereotypes.

#### *Curriculum Materials Reflect Sex Role Stereotypes*

Curriculum materials used in schools not only reflect traditional sex stereotypes in our culture, they exaggerate them. In 1972 a women's group did an extensive analysis of 2,760 stories in 134 children's reading textbooks. They found that men were shown in 147 different jobs and women in only 26, all of them "women's jobs." There were 119 biographies of 88 different men, but only 27 biographies of 17 women. The ratio of stories about boys to stories about girls was 5 to 2. Girls were shown cooking 33 times and cleaning 27 times, while boys were almost never shown doing domestic chores. The most popular room in any house, for a girl, was the kitchen. Stories with themes of ingenuity, creativity, bravery, perseverance, achievement, adventurousness, curiosity, autonomy and self-respect were four times as likely to be about boys as about girls.

American history textbooks were subjected to a similar analysis by a different group. They found the text and illustrations in eight books to be entirely male oriented. For example, a section on the pioneers read: "It was a man's job to tame that wilderness, make it habitable and exploit its riches. In the

\*Peggy W. Patrick, "Education and Counseling Status Report of Young Men and Women. A Survey of Senior Students from Fourteen Public Secondary Schools in Arkansas." Governor's Commission on the Status of Women, Little Rock, Arkansas. Dec. 1972.

\*Women on Words and Images, Dick and Jane as Victims: Sex Stereotyping in Children's Readers. Princeton, N.J.: Women on Words and Images, 1972.

process of creating a place for himself and his family . . ." Such an approach implies that pioneer women just sat back and watched, when, in fact, they were hard working tammers of the wilderness themselves. The books mention 1,103 different men and only 33 women. Almost no coverage was given to the women's suffrage movement.<sup>20</sup>

An informal review by Steiger of nine textbooks and curriculum guides for courses in technical occupations revealed sex stereotyping in text and pictures.<sup>21</sup> Students, teachers and workers were all referred to as "he" and photographs show only boys and men in technical occupations. A curriculum guide on metallurgical technology did mention women in the "student selection" section, but with this curious note. "the aptitudes and abilities of women with scientific interests and training *peculiarly suit* them for *much* of the analysis and related laboratory work in metallurgical research and metal-producing organizations" (emphasis added).<sup>22</sup> Apparently the author, having admitted that women could do this work, felt compelled, nonetheless, to treat them as quite different from men who could do the work.

#### *The Guidance and Counseling System Reinforces the Status Quo*

Women at all educational levels continue to be counseled into traditional "women's jobs", even though, for many women, those jobs are no longer a good choice. This reflects the challenge that counselors face in dealing with women today. Counselors are trained, and counseling materials are designed, to build on the experience of the past. But if the counselor relies on information from the past, including established tests, in dealing with women, the counselor may give advice that is inapplicable for today or ten years from now.

The controversy over career guidance tests, explored in depth by the National Institute of Education last year,<sup>23</sup> illustrates this problem well. These are tests of likes, dislikes and interests commonly used by guidance counselors to help steer their clients toward appropriate occupations. The tests come in two basic types. "Interest inventories," such as the Kuder Occupational Interest Survey<sup>24</sup> and the Strong Vocational Interest Blank,<sup>25</sup> which compare clients' expressed interests with those of men and women currently employed in various occupations, and instruments such as the "Self-Directed Search,"<sup>26</sup> which assess clients responses to questions about their interests in terms of certain arbitrarily or empirically determined clusters of responses. Each response cluster is believed to indicate affinity for specific kinds of work or work environments.

In either case, these questionnaires are not aptitude or intelligence tests, or measures of skill or knowledge. Therefore, they can tell little about the ability

<sup>20</sup> Jennifer S. Macleod and Sandra T. Silverman, "You Won't Do": What Textbooks on U.S. Government Teach High School Girls. Pittsburgh, Pa.: KNOW, Inc., 1973.

<sup>21</sup> The books reviewed were the following:

Adams, James E. *Electrical Principles and Practices*. McGraw-Hill, 1973.

Bohn, Ralph C. and Angus J. MacDonald. *Power: Mechanics of Energy Control*. McKnight, 1970.

Buban, Peter and Marshall Schmitt. *Technical Electricity and Electronics*. McGraw-Hill, 1972.

Hauenstein, A. Dean and Steven A. Bachmeyer. *The World of Communications: Visual Media*. McKnight, 1974.

Lux, Donald G. and Willie E. Ray. *The World of Manufacturing*. McKnight and McKnight, 1971.

Malvino, Albert Paul. *Electronic Principles*. McGraw-Hill, 1973.

Spence, William P. *Drafting Technology and Practice*. Chas. A. Bennett Co., Inc., 1973.

U.S. Department of Health Education and Welfare. Office of Education. *Metallurgical Technology*. U.S. Government Printing Office, Washington, D.C., 1968.

<sup>22</sup> Office of Education, U.S. Department of Health Education and Welfare. Division of Vocational and Technical Education. *Metallurgical Technology*. U.S. Government Printing Office, Washington, D.C., 1968, p. 10.

<sup>23</sup> In 1974 the National Institute of Education commissioned a series of papers exploring sex bias in career interest inventories, drafted guidelines for revising the tests, and sponsored a national workshop to review the guidelines. The guidelines are currently available, and a report entitled *Issues of Sex Bias and Sex Fairness in Career Interest Measurement* will be published in early 1975. Materials can be requested from the Career Education Program, National Institute of Education. The individual papers analyzing the issues (prepared under Contract No. OE-C-72-5240) are being entered into the ERIC system.

<sup>24</sup> Kuder, G. F. *General Manual for the Occupational Interest Survey*. Chicago: Science Research Associates, 1971.

<sup>25</sup> Campbell, D. P. *Strong Vocational Interest Blank Manual* (revised from E. K. Strong, Jr.). Stanford: Stanford University Press, 1966.

<sup>26</sup> Holland, J. L. *Professional Manual for the Self-Directed Search*. Palo Alto, Ca.: Consulting Psychologist Press, 1972.

of a young man or woman to master the skills necessary to hold a job in any given field. What they do purport to tell is whether the respondent possesses inventoried interests in common with those of a certain occupational group (e.g., Most physicians like classical music. Does the respondent like classical music?) or whether he or she enjoys activities related to certain occupational skills (e.g., The respondent likes to use modeling clay, play baseball and repair old furniture. Therefore, he or she is suited to occupations involving intensive use of the hands.)

Serious questions can be—and have been—raised about the value of these instruments in advising anyone, male or female. But their use for women is particularly suspect.

The interests that these tests measure heavily reflect cultural conditioning. For example, a child from a poor family who has never been exposed to classical music will not likely pick out listening to classical music as an interest. Yet this response lowers his or her rating on the "physician scale" because this is an interest most physicians have. Likewise, few girls are given an opportunity to repair electrical wiring, and so will rarely choose this as an interest. This lowers their scores for many male-dominated jobs, especially if their scores are compared with male scales.

The interest inventories do provide separate scales for men and women in some fields. That is, women's scores are compared to the scores of women in each occupation rather than to men in the occupation. This is helpful, but there are two problems. First, for many fields there are no scales for women. In fact the only interest inventory designed specifically for nonprofessional occupations, the Minnesota Vocational Interest Blank, provides only male scales throughout. Second, because women have been concentrated in so few fields, the women's scales do not differentiate well among professions. Many women have become secretaries or school teachers not because they have any real interest in these fields but because they felt that was all they could do. The scales merely reflect the interests of most women in any given field, not the interests of women who are happy with that kind of work.

An additional problem of women taking the interest inventories is that they tend to project onto the tests their perceived social role, rather than their true inclinations. In a study done in 1970, 50 women (all over age 40) first took an interest inventory with no special instructions. They showed typical female response patterns. They were then given the test again with instructions to "pretend" that men and women are promoted equally, that family and career can be combined and that men like intelligent women. Their scores changed dramatically.<sup>27</sup>

Thus it seems that women adjust their responses to the questions to reflect the traditional role, rather than responding in ways that disclose their actual aptitudes and ambitions.

The tests scored by clustering answers into patterns show problems analogous to those of the interest inventories. That is, they measure socialization as much as they measure individual interests, and the two kinds of response patterns are difficult to sort out. For example, since all women feel social pressure to show an interest in babies, it is not surprising that most women show interest in child care when they take a test. The question is, does that mean they should be counseled to find a career in child care?

John Holland, creator of the "Self-Directed Search", one of the most popular of these tests, argues that measuring socialization is useful and important. People internalize social pressures and then are really happier doing "appropriate" things.<sup>28</sup> The problem with that argument is that the social pressures are changing. Moreover, the pressures tend to impact with excessive force in a woman's adolescent years, when she is making choices that will affect her earning potential for much of her life. At age 16 a girl may feel it is appropriate for her to be a social worker and inappropriate for her to be a mechanic. By the time she turns 30 she may well feel that the traditional social pressures are simply not very important (In fact, efforts to attract women to nontraditional

<sup>27</sup> Mary Ellen Verheyden-Hilliard, "The Use of Interest Inventories with the Re-entering Woman," 1974. This is one of the papers prepared for the NIE conference cited above (31) p. 7.

<sup>28</sup> John L. Holland, "The Use and Evaluation of Interest Inventories and Simulations," Johns Hopkins University, Center for Social Organization of Schools, 1974. This is one of the papers prepared for the NIE conference cited above (31).

employment have had greatest success among women over 30.\* But by that time a critical opportunity to prepare for higher-paying work will have been wasted.

In a time of social change, career guidance tests lag behind the times. They could conceivably be useful, nonetheless, in the hands of counselors who understand the issues facing women choosing career today. The counselors could use the opportunity to explain socialization and sex role stereotyping. However, there is some evidence that counselors themselves have outdated attitudes. A 1970 study using taped counseling sessions with an actress portraying a woman trying to decide between education and engineering as a career showed considerable bias by both men and women counselors. Both wanted the woman to choose the traditional female field.<sup>4</sup> A 1971 study found that case workers had negative attitudes towards women who combine families and careers.<sup>5</sup>

Women at all educational levels and at all ages continue to be counseled into "female" fields. A program planner at UCLA with many years experience in dealing with mature women at the college level who are seeking employment, said at a recent conference: "Women continue to be counseled into areas of teaching and the behavioral and social sciences. Although we feel practitioners in these fields are extremely valuable to our society, we believe that indications are clear that employment opportunities are rapidly diminishing. We are committed to developing new careers for women and encouraging women to enter traditionally male fields. Based on eight years experience in designing and presenting programs for women, we feel it is urgent to implement a program which will increase the number of women engineers, architects and managers."<sup>6</sup>

#### *Other Aspects of School Life Reflect Traditional Stereotypes*

Program enrollment patterns, curriculum materials and the guidance and counseling system operate directly on all female students to pressure them to follow stereotypical female career patterns. Other aspects of school organization operate more subtly to reinforce these pressures.

Employment patterns in education, for example, tend to result in males holding all the top positions. In 1971 women were 67.2% of all teachers, 21% of all principals and only 0.6% of all superintendents.<sup>7</sup> The message that this gives students is that women cannot get to the top.

In extracurricular activities, boys are frequently given opportunities denied to girls, such as lab assistant or hall monitor. The disparity in opportunity shows most graphically in the area of athletics. In Waco, Texas, for example, the Women's Equity Action League found that:<sup>8</sup>

"With 19,000 students and an athletic program of \$250,000 annually for boys, the girls were allowed to participate only in tennis and the program was allotted \$970. Girls were prohibited use of \$1,000,000 worth of stadiums, athletic fields, equipment and gyms.

"An Athletic Committee, composed entirely of men, was appointed last October by the Waco school board to recommend changes in athletic programs and policies. This Committee recommended and received approval for expansion of the present boys' athletic program at an estimated increase of \$154,000 annually with no allotment for a girl's programs."

This sort of discrimination acts directly to discourage girls considering athletic careers and indirectly to show all students that girls simply are not valued as highly as boys.

In a different way, through nonfeasance rather than malfeasance, the education system discourages mature women from achieving their career potential. Many women who have left the labor force to raise families desire to

\* Norma Briggs, *Women in Apprenticeship—Why Not?* Manpower Administration, U.S. Department of Labor, U.S. Government Printing Office, Washington, D.C., 1974.

<sup>4</sup> John J. Pietrofsa and Nancy K. Schlossberg, "Perspectives on Counseling Bias Implications for Counselor Education" *Counseling Psychologist* Vol. 4, No. 1, 1973, p. 44-54.

<sup>5</sup> Ellard, *op. cit.* p. 12.

<sup>6</sup> The Continuum Center, "Proceedings of the Multi-Faceted Women's Center Conference," Oakland University, Rochester, Michigan, Oct. 1978, p. 31.

<sup>7</sup> National Council of Administrative Women in Education, *Wanted—More Women. Where are the Women Superintendents?* National Council of Administrative Women in Education, 1815 Fort Myer Drive, Arlington, Va. 22209, p. 8.

<sup>8</sup> Hearings before the Subcommittee on Equal Opportunities of the Committee on Education and Labor, House of Representatives, Ninety-Third Congress, First Session, on H.R. 208, The Women's Education-Equity Act, U.S. Government Printing Office, Washington, D.C. 1973, p. 15.

acquire further education in order to re-enter the labor force at a higher level. After all, more than 75% of all intellectual qualified youngsters who do not enter college after high school are girls.<sup>4</sup>

These women need guidance and part-time study. They frequently find neither. A recent survey of 454 institutions of higher learning found that less than half made any adjustments in the rate of work, class hours, or customary academic policies or procedures to meet the needs of women with families.<sup>5</sup>

#### RECOMMENDATIONS

The preparation for employment which the education system at all levels is providing women is inappropriate. If the schools are to prepare women realistically for life today, changes must be made at all levels. The following are a few recommendations for administrators, teachers and counselors.

1. *Assess the Problem.*—Studies of sex stereotyping in occupational and career education, including job placements, should be undertaken at the national, state and local levels.

2. *Revise Current Practices.*—Any practices which contribute to the problem rather than to the solution should be changed. Encourage all personnel to comply with the spirit as well as the letter of anti-sex-discrimination legislation.

3. *Develop Materials and Programs for Students.*—Curriculum materials and courses of study should be designed which will instruct students, male and female, about the changing career patterns of women in the United States and the relative advantages, to women, of seeking careers in male dominated fields. Programs should address both the cognitive and affective aspects of attitudes toward women and work.

4. *Develop Materials and Programs for Faculty Members.*—Inservice training programs and supplementary materials should be developed for administrators, teachers, and guidance counselors and appropriate noninstructional personnel to inform them about the changing career patterns of women and the problem of sex role stereotyping of jobs.

5. *Implement New Programs.*—Having developed materials for students and faculty, provide the time and resources necessary for effective implementation. Assess changes in attitudes resulting and revise instruction as indicated.

6. *Publicize Success.*—Make others aware of employment opportunities which transcend sex-role stereotypes and publicize successful placements in such jobs. Use in house publications, public meetings, the press, professional organizations, community organizations, conventions and other opportunities to inform peers and the public about ways in which sex role barriers to employment can be overcome.

#### BIBLIOGRAPHY

Briggs, Norma. *Women in Apprenticeship—Why Not?* Manpower Research Monograph No. 33, Manpower Administration, U.S. Department of Labor, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 1974.

Cegelka, Patricia Thomas, Chaxton Omvig and David L. Larimore. "Effects of Aptitude and Sex on Vocational Interests." *Measurement and Evaluation in Guidance* (July 1974), Vol. 7, No. 2, pp. 107-11.

Cole, Nancy S. and Gary R. Hanson. "Impact of Interest Inventories on Career Choice" One of a series of papers prepared for the National Institute of Education. U.S. Department of Health Education and Welfare, under Contract No. OE-C-72-5240, 1974.

The Conference Board. *Nondiscrimination in Employment: Changing Perspectives, 1963-72*. New York: The Conference Board, 845 Third Avenue, New York 10022, 1973.

Continuum Center. "Proceedings of the Multi-Faceted Women's Center Conference." The Continuum Center, Oakland University, Rochester, Michigan, Oct. 1973.

Hettel, Althea K., special editor. "Women Around the World". *The Annals of the American Academy of Political and Social Science*, Volume 375, (January 1968), Philadelphia. Pa.

<sup>4</sup>Kathryn L. Mulligan, *A Question of Opportunity: Women and Continuing Education*. The National Advisory Council on Extension and Continuing Education. Washington, D.C. 1973.

<sup>5</sup>*Ibid.* p. 11.

- Hilliard, Mary Ellen Verheyden "The Use of Interest Inventories with the Re-entering Women" One of a series of papers prepared for the National Institute of Education, U.S. Department of Health, Education and Welfare, under Contract No. OE-C-72-5240, 1974.
- Hohenshil, Thomas H. *New Dimensions in the Career Development of Women*. Proceedings of the Third Annual Conference for Career Counseling and Vocational Education, The College of Education, Virginia Polytechnic Institute and State University, Blacksburg, Va., June 1974.
- Holland, John. "The Use and Evaluation of Interest Inventories and Simulations." Center for Social Organization of Schools, Johns Hopkins University. One of a series of papers prepared for the National Institute of Education, U.S. Department of Health, Education and Welfare, under Contract No. OE-C-72-5240, 1974.
- Huber, Joan, editor. *Changing Women in a Changing Society*. Chicago: University of Chicago Press, 1973.
- Janeway, Elizabeth. *Man's World Woman's Place*. New York: Dell Publishing Co., 1971.
- Johansson, Charles B. "Technical Aspects: Problems of Scale Development, Norms, Item Differences by Sex and The Rate and Change in Occupational Group Characteristics". One of a series of papers prepared for the National Institute of Education, U.S. Department of Health, Education and Welfare, under Contract No. OE-C-72-5240, 1974.
- Karman, Felice J. "Women: Personal and Environmental Factors in Career Choice." Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, La., Feb. 1973.
- Kievet, M. B. *Review and Synthesis of Research on Women in the World of Work*. Columbus, Ohio: ERIC Clearing House on Vocational and Technical Education Center for Vocational and Technical Education, Ohio State University, March 1972 (Int. Series No. 56).
- Killian, Ray A. *The Working Woman, A Male Manager's View*, American Management Association, 1971.
- Lee, Patrick C. and Nancy B. Gropper. "Sex-Role Culture and Educational Practice", *Harvard Educational Review*, Vol. 44, No. 3, (August 1974), pp. 369-410.
- Macleod, Jennifer S. and Sandra T. Silverman. *You Won't Do-What Textbooks on U.S. Government Teach High School Girls*, Pittsburgh, Pa.: KNOW, Inc., 1973.
- Mulligan, Kathryn L. *A Question of Opportunity: Women and Continuing Education*, National Advisory Council on Extension and Continuing Education, Washington, D.C., March 1973.
- National Council of Administrative Women in Education. *Wanted—More Women: Where are the Women Superintendents?* NCAWE, 1615 Fort Meyer Drive, Arlington, Virginia 22209, 1973.
- Nye, F. Ivan and Lois Wladis Hoffman. *The Employed Mother in America*, Chicago: Rand McNally & Co., 1963.
- O'Brien, Patricia. *The Woman Alone*, New York: Quadrangle/New York Times. Brook Co., 1973.
- Patrick, Peggy W. "Education and Counseling Status Report of Young Men & Women: A Survey of Senior Students from Fourteen Public Secondary Schools in Arkansas." Governor's Commission on the Status of Women, Little Rock, Arkansas, Dec. 1972.
- Rosen, Howard. "Recent Findings Underscoring the Need for Linking Counseling and Labor Market Information." Paper presented at the American Personnel and Guidance Association Convention in Atlantic City, N.J., April 1971.
- Rosen, Benson and Thomas H. Jerdee. "Sex Stereotyping in the Executive Suite" *Harvard Business Review*, Vol. 52, No. 2 (March-April 1974), pp. 45-58.
- Schlossberg, Nancy K. and John J. Pietrofesa. "Perspectives on Counseling Bias: Implication for Counselor Education." *Counseling Psychologist*, Vol. 4, No. 1 (1973), pp. 44-54.
- Sommers, Dixie. "Occupational Rankings for Men and Women by Earnings", *Monthly Labor Review* (August 1974) Vol. 97, No. 8, pp. 39-51.
- Steel, Marilyn. *Women in Vocational Education*. Supplementary Report to *Learning a Living Across the Nation: Project Baseline*, Third National Report (Fiscal Year 1972) Flagstaff, Arizona: Northern Arizona University, In Press.

- Sweet, James A. *Women in the Labor Force*. New York: Seminar Press, 1973.
- Tittle, Carol Kehr; Karen McKarthy; Jane Faggen Steckler. *Women and Educational Testing*. Educational Testing Service in collaboration with the Association for Measurement and Evaluation in Guidance, Princeton, N.J., 1974.
- Tsuchigane, Robert and Norton Dodge. *Economic Discrimination Against Women in the United States, Measures and Changes*. Lexington, Mass.: Lexington Books, D. C. Heath Co., 1974.
- U.S. Congress. "The Women's Educational Equity Act, Hearings before the Subcommittee on Equal Opportunities of the Committee on Education and Labor, House of Representatives, Ninety-third Congress, First Session on H.R. 206, Part 1; Hearings held in Washington, D.C., July 25, 26; Sept. 12 and 13, 1973." Printed for the Committee on Education and Labor, Carl D. Perkins, Chairman, U.S. Government Printing Office, Washington, D.C.
- U.S. Department of Commerce, *Consumer Income: Household Money Income in 1972 and Selected Social and Economic Characteristics of Households*. Bureau of the Census, Social and Economic Statistics Administration, Superintendent of Documents, U.S. Government Printing Office, 1972.
- U.S. Department of Health, Education and Welfare, Office of Education. *A Look at Women in Education: Issues and Answers for Health Education and Welfare*, Report of the Commissioner's Task Force on the Impact of Education Programs on Women, Nov. 1972.
- U.S. Department of Health, Education and Welfare, Office of Education. *Vocational and Technical Education, Selected Tables, 1972* Division of Vocational and Technical Education, U.S. Office of Education. U.S. Government Printing Office, Washington, D.C., 1972.
- U.S. Department of Labor, Manpower Administration *Manpower Report of the President, 1974*. U.S. Government Printing Office, Washington, D.C., 1974.
- U.S. Department of Labor, Women's Bureau, Employment Standards Administration. *Careers for Women in the 70's*. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 1973.
- U.S. Office of Management and Budget, Executive Office of the President. *Social Indicators, 1973*. U.S. Government Printing Office, Washington, D.C., 1973.
- Women on Words and Images. *Dick and Jane as Victims—Sex Stereotyping in Children's Readers*. Princeton, N.J., Women on Words and Images, 1972.
- Vetter, Louise "Career Counseling for Women", *Counseling Psychologist*, Vol. 4, No. 1 (1973), pp. 54-67.
- Vetter, Louise and Barbara J. Sethney. "Planning Ahead for the World of Work: Research Report Abstract, Teacher Manual, Student Materials, Transparency Masters", Columbus, Ohio: Center for Vocational and Technical Education, Ohio State University, R&D Series 46. January 1971.
- For a comprehensive bibliography on women and work see:
- Bickner, Mel Liang. *Women At Work, An Annotated Bibliography*. Los Angeles, Ca.: Manpower Research Center, Institute of Industrial Relations, University of California, 1974.

Mrs. CHISHOLM. Thank you very, very much. The three of you have certainly given us a great deal of information, and I know that we will have numerous questions. Since we have another panel to hear from this morning, we shall attempt to ask questions likely to elicit answers as brief as possible so that we may get in as many questions as possible.

First of all, Dr. Steiger, you worked over at the National Vocational Advisory Council for some time and you made recommendations for research projects focusing on women.

What was the reaction of the Advisory Council to your recommendations?

Dr. STEIGER. Well, essentially it was the reaction that I mentioned in my paper. That is, it was not considered a serious problem. At some point, among some of the members, it was actually considered funny. You know, if you mention sex bias, you get a tittering re-

action. You bring up sex bias and people feel uncomfortable with it. They feel very uncomfortable with it. They don't know what to do about it, so there is a denial reaction.

The advisory council has made no statements whatsoever anywhere of their publications on this issue. There was one member of the advisory council who was beginning to speak out quite forcefully. Her name is Martha Bachman. Her term expired. She was not reappointed.

The statistics that Dr. Steele presented showed four women members on the advisory council. Well, the new appointment just came through. Now there are three out of 21. Of those three, one of them is a woman who was appointed specifically to represent the needs of handicapped children. She is also a black woman and represents that constituency, so she is there representing three different constituencies.

The one woman who was reappointed is the student representative. She does a wonderful job, but her essential role there is to represent the needs of students, not the needs of women.

There is one woman on the council who is not already representing another category, and she is there to represent parents. She is not a workingwoman herself.

That is the make-up of the National Advisory Council. They simply have had no interest in this subject heretofore, although they are beginning to. The issue has now come up. They are considering it, and I believe that perhaps they will begin looking into it now. It has been a long time coming.

Mrs. CHISHOLM. You have talked a great deal this morning about the planning, Dr. Steele, for pregnant girls and the lack of enough plans for such programs and the failure of society to own up to this reality.

I noted with interest, Dr. Steiger, the interest all morning on this planning, family planning that is. How would you handle the situation where parents are opposed to having this type of course taught to their children?

Dr. STEIGER. I think this is a crucial question. I am a practicing Catholic myself and I am very aware of the sensitivities on this issue. I think, however, that it can be dealt with simply by allowing an optional enrollment. That is, if a parent objected to a student being enrolled in the course providing family planning information, the parent should be allowed to say that the student will not attend such a class.

On the other hand, the fact that some parents prefer their children not have this information should not keep the school from providing it to other students who may want the information. I think it should be on a optional basis.

Mrs. CHISHOLM. Dr. Steele, I would like to ask you a question. What do you view as the most effective means of dispelling the myths about women and communicate the reality of life in today's job market for our young people.

How do we help high school seniors and high school people to select other areas of endeavor when, from the first, they are inculcated with certain values and that have been transferred to them by their parents and the society?

Do you have any suggestions or recommendations?

Dr. STEELE. I do think that we need retraining for our educational trainers. I think we need retraining for staff. We certainly need retraining for our counselors in our public schools, and we need training to create awareness of all of the inequities in our society including sex stereotyping.

Mrs. CHISHOLM. Just one question to Ms. Perlman. You focused primarily today on union women. How is it that union women who have become a force to be reckoned with and who are very, very activist in their outlook and their attitudes—how is it that they have not been able to penetrate the higher echelons on the management and policymaking levels within union.

Ms. PERLMAN. I think you could say that we suffer from the very same thing that we are talking about the girls suffering from in high school. It takes a long time to overcome that. I think that is what you see happening, and that is why the Coalition of Labor Union Women got started.

Mrs. CHISHOLM. One more question, Dr. Steele. Then I will turn it over to my colleagues. Why do we need to address ourselves to sex specifically in the vocational education area when we already have title IX in the Women's Educational Equity Act?

Dr. STEELE. Because of the issue that you made in asking your question. That is, that the discrimination is within the society. The schools reflect the society they serve. Therefore, the matter of enrolling in classes really is somewhat voluntary, but we have got the problem of parents who want girls in traditional roles and we have got the problem of teachers, administrators, and so on who are accustomed to having girls in traditional roles, shop teachers who don't want girls in their classes where the machines are and home ec teachers who feel uncomfortable having boys in their classes. so it is a matter of reeducating the society, and it is very necessary that this be changed.

Mrs. CHISHOLM. Thank you. With all due respect to my colleagues, although St. Paul said that the women should stand in silence. I am going to call on Mrs. Mink. Then I will come back to you.

Mrs. MINK. Thank you very much, Shirley. I am all in favor of this special treatment this morning. I have some questions with regard to the pending legislation. I certainly want to commend all three of you for your fine statements and the statistics and other justifications that you have provided the committee.

My concern is directed to what can we do with the programs that we have in effect now which are funded by the Federal Government? What kinds of directions can we take in your view? I am not in favor of simply holding out carrots and incentive moneys to local school districts and State boards, trying to entice them with additional funds or set-asides to begin to look at this question.

It seems to me we have gone in this direction before and haven't made very much progress. I think what we need is some very, very careful attention to the existing language of the legislation, and express in legislative, statutory terms precisely what we feel are the essential priorities.

What is your reaction to a definite set-aside of funds in vocational education for career education programs specifically designed for women?

Dr. STEIGER. I think there are a number of different approaches that can be taken. I think the more that are taken simultaneously, the faster we are going to get change. One thing that has to be done is that title IX has to be enforced, and nobody is doing it.

If there were funds put into both direct enforcement—that is, going around and finding violations—and also providing technical assistance to schools who want to get into compliance, that could be a help right there.

There is \$34 million a year in parts C and D that is research and exemplary development funds. It is supposed to go in priority areas to bring about change in the schools. To my knowledge, something less than \$200,000 of this last year was devoted to the area of overcoming sex bias towards women. It is less than 1 percent of the money.

It could be possible to mandate that a certain amount of that money be spent, although my actual belief from talking to some of the vocational educators and seeing the gradual change in their attitudes—and it has been very gradual, but over the past few years I think some of them are now receptive to the idea of doing something about this, and their awareness is very slowly being raised.

One State where something is being done is in North Carolina where they have created an office somewhat like the one I suggested in my testimony. That is, there is a woman named Amanda Smith who was given a small amount of money—I think she had \$53,000 over 18 months—and was told to do something.

Well, what she did was to start holding workshop sessions and other kinds of meetings and special programs with the leaders in vocational education throughout the State, just explaining to them what the problem was and what they could do to change, and she is getting a little more help. They are beginning to put some of their other kinds of vocational education funds into this.

I would hate to see the issue thrown off on external funding sources in any way. There is almost \$600 million Federal money to vocational education. Half of that money is going to educate girls and it is being spent in very ineffective ways. Let us use the \$300 million that is already there and do it right.

Mrs. MINN. That is exactly my question. Well, I am in agreement that we are not doing a good job. My question to the three of you is: How can we better utilize these funds and how will we do it in statutory terms?

Dr. STEIGER. I think if you just establish the priority in the legislation, that girls should receive vocational education equal with that of boys, you mandate something in the State planning mechanism, whether it is an incentive program or just that each State must come up with a plan for overcoming sex bias. You can define what it is, but put it right there in the middle of the State plan, so that each State must come in with it; but then the problem is having someone enforce that because historically nobody has ever rejected a State plan. Some of them have not been quite adequate, so you do have an enforcement problem all along the line.

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The more you mandate, the more you then have to come up with a better enforcement procedure for all vocational education even outside this particular area, but I actually believe that, although incentive programs have not been terribly effective in some other areas, incentive programs might be quite effective here because there is local pressure and there is a growing awareness.

Mrs. CHISHOLM. Thank you. Mrs. Mink.

Mr. Simon.

Mr. SIMON. Yes. My apologies to my colleagues who have either seniority or should be in order of rotation. I don't want to impose on you.

I have a couple of questions. Number one, I appreciate your testimony. Number two, it seems to me that one of the things we could do in the subcommittee is to recommend for action by the total committee in addition to whatever legislative change is a request by the full committee that the National Council move in this area, and I think a resolution by our full committee would have some weight with that body, so I simply suggest as a possibility that I think some women could move on and move on very quickly and get some action quickly.

Mrs. CHISHOLM. Thank you very much. Mr. Buchanan?

Mr. BUCHANAN. Thank you. Madam Chairperson. I believe my colleague to my right is on a tight schedule. I will yield to him.

Mr. JEFFORDS. Thank you very much. I have a couple of brief questions. I just came back from Vermont where I traveled through some vocational education schools and asked about the problem of sex discrimination. At least in one school where I brought this subject up, it was claimed that there was no discrimination, but there had been very little interest shown by boys to get into home economics or by girls to get into mechanically-oriented programs.

You have talked about incentive programs, and I wondered if you could give me any idea, or at least some idea, what you mean by the type of school program that perhaps will get some results.

Dr. STEIGER. OK. The major project which I am running this year is for the division of vocational and technical education in the State of Illinois.

What they have commissioned me to do is to develop essentially a series of lessons and teaching materials both for students and for teachers, and what will happen with these is—I have a 1-week class which becomes part of a career guidance program or career education program which simply lays out in a more entertaining fashion some of the statistics which have been presented today.

I have a game here. I have brought some materials which I will pull out and show you in a minute, essentially to make the point to boys and girls that all careers are open to them, that they should be thinking in slightly wider terms. This is what your career awareness program should be doing, but, alas, as this one study I have quoted has shown, they simply are not. They simply have not addressed this issue.

We have this program for the girls, for the girls and boys, by the way. That is very important. I think it is crucial that all of this information get to both girls and boys because one of the biggest problems that girls have when they go out and find jobs, particularly

if they look in nontraditional areas, is the attitudes of the men with whom they have to work and the attitudes of their husbands, brothers, and next-door neighbors, so it is important to reach the attitudes of boys and girls in the schools, and it is crucially important to reach those teachers.

I had a superintendent of schools saying to me the other day that he would be delighted to open up the enrollments in some of his technical courses to girls, but he had trade teachers who had told him that they simply would not have women in their classes. He said: "What can I do? These are good teachers. I don't want to lose them."

There is a great deal to be done here, but I think—Let me pull out these materials and show you some of what I mean. These are originally designed for preschoolers, but I think they would be good in elementary schools too. These are little cardboard cutouts, and for each career they have both a man and a woman: Policemen, doctors, nurses. They are also multiracial, which is very nice. Construction workers, businesspeople, and letter carriers.

You just put things like this around in the programs. I also have a whole collection of photographs. These are photographs of men and women in nontraditional occupations. They are real people. These aren't posed. These are people who are really in these various professions.

Here is a man at a sewing machine, a woman businesswoman, male child care worker, male nurse. I love this one, a woman taxi driver in New York City. I showed this to a friend. She said: "I have ridden with her. I know her. She really does drive a cab." I said: "Yes, she does."

Simple things like this are a start. That is, that the real problem is an underlying attitude that women don't have these options. If you have materials like this around the classroom and you are changing what the textbooks say, changing career guidance, and begin to change attitudes at the elementary and junior high school level, then by the time they get to the senior high school level you aren't going to have this tremendous reluctance of girls to even venture into the boys' areas and vice versa.

Dr. STEELE. I would like to address myself to Mr. Jeffords because I did bring with me statistics that include the State of Vermont and show that there are very serious discriminatory patterns within individual education programs in the State of Vermont that were perhaps more restrictive than the overall national average.

There was a balance of 50 percent enrollments of male/female in their overall enrollments in Vermont in 1972. There were some very, very serious areas. For instance, in T. & L, the trades and industrial education program, there were only 3 percent female in that program in Vermont. The same thing was true in technical education. Ninety-seven percent male in technical education.

While you find they say they don't have a problem with discrimination, nevertheless the enrollment patterns that their State department submitted to the U.S. Office of Education indicate that serious discrimination did, in fact, exist.

Mr. JEFFORDS. Of course, that goes to the definition of discrimination. As I was saying, just because existing opportunities are not

taken advantage of, this does not indicate a pattern of discrimination. In discussing the area of incentive programs, I want to make sure that everyone knows that these opportunities are available, even though I am sure there is some discrimination being practiced.

Dr. STEELE. Right. I know. By the same token, I would like to address myself to higher education because I think we have severe problems in our teacher training institutions, that they are in serious need of retraining. In fact, they are the ones who impact upon those teachers and the administrators who are going out and teaching and being administrators in our public schools.

We have to start there in order to retrain them to prepare classroom teachers more effectively.

Mr. JEFFORDS. I have one more brief question for you. On page 30, paragraph 2, you indicate concern, certainly a legitimate concern, about the failure to have sufficient women on advisory boards for vocational education.

Are you indicating that we ought to mandate equal—

Dr. STEELE. Absolutely. I think it is necessary. I think it is critical that we have equal numbers of male and female on our policy boards, and that is really where the decisions are going to be made.

Mr. JEFFORDS. That ought to be mandated in the statute?

Dr. STEELE. Yes.

Mr. JEFFORDS. Thank you. That is all I have.

Mrs. CHISHOLM. Mr. Buchanan?

Mr. BUCHANAN. Thank you, Madam Chairperson. I regret for two reasons our entire committee is not here this morning. Madam Chairperson, first of all because of the excellence of the testimony.

Dr. Steele indicated that on advisory boards you did not need women who would sit there and look pretty, but rather people who would speak up.

I want to risk being accused as a chauvinist by saying that this morning we have had pretty women who spoke up, which is sometimes the case here in Congress as well. If that makes me a chauvinist to have that reaction, I am of the opinion that one of the real problems we face is that, while Ms. Perlman's analysis of the two working parent family as being the norm is doubtless correct and we are no longer in pioneer times, I am afraid the psychology of human attitudes in this country is much closer to the pioneer era, and it would appear to me that not only a great number of the men, but many women, have male chauvinist attitudes.

Second: I recall, Madam Chairperson, one of my earlier experiences, while living in a little mill town, a nonunion mill, at which most of the men and women of the town were employed. The men would go to work and come home and put on their slippers and read the papers and the women would go to work and come home and fix the dinner and take care of the children and so forth.

That is a little extreme, but I am afraid we do have a situation that is very close to that, in addition to the problem of the many homes that are headed by a working mother.

I wonder—It would appear to me you ought to show some concern for the male role, that such courses as those in which women are concentrated—that boys also be encouraged to attend.

I wonder if this area of sex discrimination isn't one of the most important questions we have to face, Madam Chairperson. If we are going to look at the realities of our present economy and our present situation in this country now, I wonder if this isn't a very important question.

Dr. Steiger and Dr. Steele may wish to comment on Ms. Perlman's recommendation that we have more enforcement people in the Civil Rights Division of HEW in order to adequately handle this problem and their other responsibilities.

Then I wonder if Dr. Steele and Ms. Perlman would like to comment upon Dr. Steiger's several recommendations to the committee pertaining to this legislation.

Dr. STEIGER. I think it is crucial that there be more staff put into OCR to enforce title IX, not just in the vocational education area, but across the board. It is woeful. It is incredible. There is nothing they can do with the staff they have and the demand they have.

The one thing they have done in this area which was their survey of vocational education and technical schools about a year ago—essentially that was a survey looking for title VI violations, which are crucial and they must find and they must prosecute those discriminations. This is still a serious problem in vocational education, but they did manage, thank Heaven, to tack on the title IX question, just to look for it, but those forms are still sitting there. Nobody has even put that data on tape. There is no way to get at it.

If you call up a State director of vocational education, he will deny that he has it because they are terrified of those numbers, and the OCR people who are of good will simply don't have the resources to prove that data.

You know, even the information so that external groups can then take and run—all you have is file cabinets where you have forms filled out by hand, sitting there. Nobody can get at it.

I think there should be some specific aid given to OCR to enforce title IX across the board, but, beyond that, specifically in the area of vocational education I think that work has to be done through the vocational education legislation itself because that is what the vocational education people live by.

This is a very heavily federally funded program. Vocational educators are much more sensitive to congressional direction than are educators in a lot of other areas because they are heavily dependent on Federal funds.

I think if it were made sufficiently clear in the vocational education legislation that this is a priority of Congress, that they are going to be held accountable for it the next time GAO goes out there to look, sex discrimination isn't going to be on page 189, but it is going to be right up there in the front, it is going to be a chapter, you are going to get some action.

Ms. PERLMAN. Well—

Mr. BUCHANAN. Would you support Dr. Steiger's recommendation we might put in stronger language pertaining to the Advisory Committee?

Dr. STEELE. Yes, and I also would like to reinforce what has already been said. I particularly want to point out the issue—the fact

that statistics are not being kept any longer in vocational education by sex.

It is critical that we have those statistics by sex. We will not know what progress we are making otherwise. It is critical that they also be kept by race, and we haven't had them since 1972.

Another thing I would like to point out—I fail to understand why we cannot have them broken out by percentages. The computer could do it. It isn't that much more effort.

One of the reasons you don't get a simple analysis of the statistics is the fact that you don't have the percentages to look at, and it is a very time-consuming task to do it by pocket calculator.

Mr. BUCHANAN. Thank you, Madam Chairperson. I again would like to compliment the testimony.

Mrs. CHISHOLM. Mr. Lehman?

Mr. LEHMAN. Thank you, Madam Chairperson. I just want to compliment the panel here. What bothers me is the fact that a good portion of the \$300 million allocated for the vocational education for women is in the area of home economics, but I would like to see some kind of homework or investigative study. I would like to see if it is a salable skill? If not, let us get it out of vocational education and put it back into general curriculum. In vocational education for women you can really teach them salable skills. They can go out in the marketplace and get this homemaking or this housewife stuff out of vocational education. It is equivalent to putting general home repair as half of the vocational education for men. Everybody has to change light bulbs and fix sockets and things, but that isn't anything a man can go out and sell in the open market.

I would like to get your comment on this, whether you think we are risking the whole program by eliminating homemaking. This was put in there originally in order to get the program underway, and homemaking was the women liberation vocational education of the 1940's and early 1950's, but we have passed through that phase now. Let us get on to salable skills.

Would you react to that?

Dr. STEELE. I would hate to see home economics downgraded in the curriculum, which is apt to happen, because we are really talking about the maintenance of human life and human well-being when we get into the area of nutrition, child development, consumer education. It is not being well taught in our school system. We have too much evidence that our young people are unable to manage their finances, and in the credit card society that we exist in, bankruptcies and so forth are increasing, so I see these as critical areas of need in a free enterprise system as well as in the life maintenance system.

It is true—

Mr. LEHMAN. Would you yield? That is consumer education. That is not vocational.

Dr. STEELE. But this is traditionally—It has been taught in home-making and has been a part of the legislation for that many years. Of course, there are some wage-earning programs in home economics. The need for child care is a demonstration of one of them.

What we need to do is raise the pay in that area.

Mr. LEHMAN. For a housewife?

Dr. STEELE. That is true.

Dr. STEIGER. I think this is a serious problem because what we are dealing with is a historical curiosity. That is, that home economics was originally put into vocational education legislation back in 1960 so there would be something for women because of course, everyone assumed that all job training programs were for men, so that is the way it grew up.

On the other hand, given that history, it has developed into a fairly powerful, fairly significant, and fairly important course, and, therefore, it pays for half the wages of the women employed in the vocational education system. I would hate to see them just cut out.

I think the subsidies for consumer education, homemaker training, family life—All these things are very important to keep. Whether or not it is kept technically attached to the vocational education legislation I think is a technicality which is up to you to resolve.

It would be much neater if that were part of some general education legislation, but, if in transferring that \$30 million a year, Federal subsidies got lost, I think that would be a loss to the entire country.

I do think it is crucial that those programs get out of their single sex orientation, that family life programs be clearly for fathers as well as mothers. In fact, in my experience, it is much more important to do some child-care training for fathers.

Most mothers I know aren't too startled when a baby wakes up in the middle of the night when you first get it home, but fathers seem to fall to pieces. They find it quite startling that babies have to be fed at 2 o'clock in the morning and then again at 6 and this sort of thing.

I would like to see family life programs and consumer education, as Dr. Steele said—They are really important, but whether or not they should be part of this legislation I think is a technicality.

Mr. LEHMAN. Would you like to take part in it? The only thing I see in there that you want vocational education money with non-salable consumer education belongs in areas such as social studies, and I sold used cars for 24 years in Miami and I know that people got out of high school and didn't know how to buy. They didn't know how to look at conditions of sale contracts or even make any sense out of it. You weren't learning that in high school and it puts them at a terrible disadvantage.

What I am trying to say is that, if you are going to have vocational education, my idea—not to teach them how to fix up a kid at night and give them a bottle and fix the formula. My idea of vocational education is to teach them something that they can go out into the job market with, whether it is a man or a woman, and be able to sell that to some employer in some employment market.

Dr. STEIGER. I think it is crucially important that those home economic courses not be presented to the students as if they were training them for job skills. I think that that distinction has to be made.

Mr. LEHMAN. You don't think we ought to do any statutory changing in the way the law is written so that the women's portion of the training will not be watered down by the home economics?

Dr. STEIGER. Absolutely. I think that if it does stay in the vocational education bill, it has to be in a separate categorical program which is clearly labeled, "Consumer and Homemaking." It is now—It is part F. I mean although they can use part B funds—and different States do that in different ways—I think that some distinction has to be made so that they cannot put money into these programs except categorical consumer education.

Mr. LEHMAN. They are taking money out of those vocational education programs and teaching nonvocational subjects.

Dr. STEIGER. I think an end should be put to that.

Mr. LEHMAN. You tell me how to do it and I will get to it.

Dr. STEIGER. OK.

Mr. LEHMAN. The only other question I would like to ask—and it really doesn't deal directly with this committee. I think how soon the woman/man role has developed. In the Select Education Committee we are working on legislation that deals with child/family care legislation where we hope to be able to develop child/family care programs for preschool children, not only in the present type of day care center where the people are on welfare and so forth, but in middle-income levels.

I just wonder whether we shouldn't perhaps write some kind of legislation into that program so that even at 2- and 3- and 4-year old level—Sometimes by the time they get to the first grade, it is too late to change attitudes. If you can give me any help—and I am on the other subcommittee. If you can give me any help in writing that kind of legislation into this program because this is getting a foot into the door for preschool programs for middle income and lower-middle income without watering down the kind of program we have now that are going to have to be protected against child training.

Dr. STEIGER. The Women's Action Alliance in New York developed the materials that I have shown here. The director also has a comprehensive curriculum for preschoolers to eliminate sex bias for preschool training.

Thank you very much. Thank you, Mrs. Chisholm.

Mr. MOSSE. Thank you, Madam Chairperson. May I commend the witnesses for their fine statements. Handling sex discrimination with regard to this committee's work, and particularly on the Subcommittee on Post-Secondary Education, has been quite a learning experience.

I read in Ms. Perlman's statement that everyone should know how to cook, fill out tax forms, and complete applications for bank loans. Much to my surprise, for every woman who has suggested to this committee that it be mandated that women have the opportunity to enroll in courses providing such opportunities, there are, in fact, almost as many women on the other hand who feel that they ought to be left alone. I only say that in the interest of equity since the other side is not represented here today. It is important for you to know that Members are also approached by women who don't want to be forced into roles that are not traditionally stereotypical.

It is obvious, I feel, to every member of this committee, which in this area is certainly one of the most responsive committees in Congress, that automatically stereotyping women into various sex roles is blatantly a denial of equal opportunity.

I think Dr. Steiger's statement, on page 3 of her testimony, that the vocational education system should be helping to eliminate past inequities by providing equal opportunity for job training in all fields for both sexes hits the nail right on the head. That is the issue. The Federal Government could become very overburdened if it begins mandating everything that school systems should and should not do.

Title IX, which is a very well written law, unfortunately has not been strictly enforced because there aren't any regulations. It has taken 2 years to get them out in proposed form; they were issued June 20th of last year, and the Secretary of HEW has just transmitted them to the President. So, until the President signs them and this committee has had an opportunity to take a look at them, it will be very difficult to enforce the law. I wouldn't particularly blame the legislators for that deficiency in enforcement.

The point is: If we can, through legislation, through proper regulations, through proper funding of the Office of Civil Rights, insure that women will have the opportunity to learn that which they please and not that which people dictate to them, I think we will have done the best we possibly could for everybody, and particularly for the women's groups as well as those who choose more traditional roles.

Ms. PERLMAN. I think all three of us are not saying that every woman—or one woman must be a taxi driver—but that all options must be open to all women.

Mr. MOSSE. I would hope that all three of you are saying just that.

Dr. STEELE. We—

Mr. BUGHANAN. Would counsel yield to me on that point? On the other side of that—and tell me if you are not also saying this. In Ms. Perlman's scenario of the two working parent family as the norm, which I think is the case—at my house, both my daughters can testify that when mother is ill it is a disaster for everybody because I don't have any cooking or housekeeping skills and I never was taught any skill and I fumble around and we get by, but it isn't a very happy situation for anybody, and I think that is the norm, too.

Isn't the other side making available, as long as you include in the vocational education category such skills as some of the home economics skills—doing what we can to make sure there is encouragement that both male and female students take advantage of learning skills that as a parent that person is apt to need if he lives in a typical or she lives in a typical situation, as well as making the wage-earning skills available to everyone?

Dr. STEIGER. I think that is a point that all three of us have made in trying to speak up for the united home economics programs. That is, those programs have lots of problems, but the fact is that this country does desperately need some good family life education and consumer education programs.

Dr. STEELE. And health education.

Dr. STEIGER. We are not about to give up those little shreds that we have, even though we are, all three of us, firmly committed to job training for women. We also are committed to life for both men and women in this country and improving the quality of life.

I think that would be part of it, that we need more male enrollments in those family life programs and consumer education programs desperately.

Dr. STEELE. In answer to your comment about your helplessness in the kitchen, I have the same helplessness when I drive a car and have a flat tire. I am in real desperate straits on the highway when my car stops dead, and so it is the same thing. Why should I, who has been taught to drive a car, I think quite successfully, not know how to do anything underneath the hood of it.

Mrs. CHISHOLM. Mr. Miller?

Mr. MILLER. Thank you, Madam Chairperson. I would like to ask a couple of questions. You have gotten into the question of home economics and especially the question of nongainful employment, a question I raised some time last month when the GAO report came out.

My concern is that \$30 million we are spending under the name of vocational education for this program is taking away from programs that might lead to gainful employment for women and others in the job market.

While I think it is very clear that none of us would like to see a less in any gains that may have been made in terms of family life education and so forth—let me ask you this. In your studies of the various breakdowns in the courses offered, do you find that there are vacancies in programs currently offered? Is there room in the shop courses, and industrial and trade courses under the current given level of enrollment in those courses?

Dr. STEELE. The figures indicate that there are higher enrollments in such places in the classes that girls predominate in. There are higher enrollments than there are in others.

In fairness to the male-intensive programs, however, it is possible—at least the teachers claim that you have to have smaller enrollments because of the technology and so forth.

Mr. MILLER. Limited by availability of machines?

Dr. STEELE. There is a lower pupil-teacher average in the male-intensive programs.

Mr. MILLER. For example, in a course in auto mechanics, you may have a lower teacher-pupil ratio simply because there may only be two automobiles available to work on and you may have students standing around? Is that a possibility?

Dr. STEELE. That is a possibility.

Mr. MILLER. The same thing is true in the wood shop and machine shop.

Dr. STEELE. What it suggests is that we ought to be providing funds so that more have the opportunity to enroll in those classes.

Mr. MILLER. Exactly. Exactly. And that is why I am concerned that should we shift nongainful teaching out of vocational education, that somehow that \$30 million will go with it—out of the vocational education budget. And I don't think that is popular, because if you do realize the goal of getting more women involved, you are going to have to expend capital outlay for machines and technological devices and for teachers.

Dr. STEIGER. May I respond? I would like to broaden this discussion just a little bit to another problem in the whole area of

vocational education funding. That is, there are many courses at the secondary school level that are not actually job training. The revisions added to that law in 1972 specifically authorized funding in industrial arts, training for volunteer firemen, any number of other things.

You talk to secondary school level, not postsecondary—You talk to secondary school level teachers. You say: "OK. What I want to know from you is your job placement rates and the beginning wages of your graduates," and you will get a very long story about how they are keeping kids from dropping out because the courses are more interesting and they are improving their lives by getting them interested in basic education. There are 500 reasons why vocational education courses are great at the secondary level that have nothing to do with the fact that they are not really placing them in jobs. OK? This is a very difficult issue and, although the home economics section is part of it and has its own problems, the fact is the issue of whether or not every vocational education training course is actually training a kid for a wage-earning job is an issue that goes far beyond just home economics.

Mr. MILLER. No question, but the theory at least behind many of the programs now normally occupied by males is that they are teaching them a marketable skill: auto mechanics, carpentry, so forth. They may not use that when they get out of high school. They may use it 5 years from now. They may never use it, but they are supposed to have come up with a skill. The quality programs may dictate, but that is the theory.

Nonprofit home economics is by admission not for the purposes of developing a salable skill.

In your report, "Vocation Preparation for Women," you talk about the need for women to move toward occupations now predominantly occupied by males, and the trades are an area where there are probably more job openings in the future than there are now out there for that job, as opposed to professional.

I think this again points out the reason why you have got to take a look at how you are using money now designed for vocational education.

If we want women to move into these skills, if we want women to prepare themselves for those occupations, we have got to provide money to train them, because I think one of the arguments you are going to get out of a lot of shop teachers is: "I only have nine lathes, and I can't put anybody else to work on them."

Dr. STEIGER. Of course, in vocational education, those allocations are made at the State level.

Mr. MILLER. By an all-male board, right?

Dr. STEIGER. Right.

Mr. MILLER. I am just trying to clarify.

Dr. STEIGER. You are absolutely right. If you are going to maintain—if you are going to expand female enrollments in nontraditional fields while maintaining the traditional female ones, then you are talking about more money.

Mr. MILLER. My other concern is this. Under the proposed regulations, it talks about the objectives of vocational education and talks

about gainful employment, and it doesn't seem that vocational education nongainful qualifies.

The question is whether or not we ought to allow funds to be expended in that fashion in violation of what will be the law.

Dr. STEIGER. I think probably the best way to handle that is not allow expenditures of Part B funds, but to provide a separate category either in this law or writing in that you amend this law as the ESEA Act or some other act, that there is a special category for nongainful programs, that it is not an allowable expenditure of part B funds.

Mr. MILLER. Dr. Steiger, in a paper submitted to this committee by a witness originally scheduled to be here who didn't show, she talks about the Kaufman report of 1967, which says that vocational education is being restricted by prevailing stereotypes such as proper occupations for women.

In your report almost 10 years later, you say that the traditional female fields of homemaking, home economics, office occupations, taken together, account for 84 percent female enrollments in vocational education nationwide. Then you go on to talk about in Illinois.

Where have we come from 1967?

Dr. STEIGER. Not very far. It is just now beginning to change. The percentage of women who are working is going up steadily. The pressures have been increasing, but the change is very gradual. There is no question about it. The only reason there has been any kind of dramatic change in some areas is because there have been suits in the courts based on antidiscrimination legislation.

Mr. MILLER. It is suggested by the Center of Law Social Policy in their comments on the regulations that we had better start reading vocational education in light of existing law, meaning title IX and the U.S. Constitution.

When do we reach that point where we start cutting off funds because of discriminatory practices?

Dr. STEIGER. I think the time is now. I think that in those cases where there are blatant violations—I mean you don't need the fancy regulations in title IX to know that a school which is 100 percent male enrollments—it is kind of like a boys' trade school. You ask them: "Will you employ girls?" They say: "No." I mean you can cut off their funds right now today, and I don't think anybody is going to give you a hard time if the technicalities in those schools exist.

Dr. STEELE. If you watch national statistics, change comes very slowly, and that is a point you are making about 1967 figures. If you keep increasing slowly at a very small percentage of 2 or 3 percent a year, it is going to take 25 or 30 years to make the figures anywhere near equitable.

I think analysis was done in the field of higher education for women by the Carnegie Commission, and they predicted it would be almost 1990 before women would be 35 percent in administrative positions in education.

Mr. MILLER. I agree with you. I am afraid that if I survive in Congress that long I am going to pick up a report 20 years from now which says — This is 20 years after Brown. It came in this week into the office and it says in 1972 in the Nation's 100 largest districts, 79

percent of the black students attended predominantly minority schools. This is 20 years after Brown. Twenty years from now 84 percent of the people are still going to be learning how to type and

I think it is a very serious question. I mean we have reached that point where States are going to continue to grab off large chunks of Federal money for programs that just blatantly discriminate against the education of women.

You had a comment?

Ms. PERLMAN. I think that all three of us just want to say that that kind of program — vocational — the home economics program for women — and we don't really care where you put it, but we don't want you to rob that program to expand this. We want new funds to expand this.

Mr. MILLER. General education, as far as I am concerned. Just one more question.

Mrs. CHISHOLM. Excuse me one second, Mr. Miller. We are running against time in terms of another panel that we have, so why don't we do this? Your questions are very, very important. Could you maybe select the two most important ones? I hate to do this to you.

Mr. MILLER. I understand that. I just want to get it again. Is it this panel's contention, that the key to enforcement — is we consider the cutoff of funds, and the State plans have got to keep better statistics, is that correct?

Dr. STEIGER. That is right.

Mr. MILLER. Just for the record.

Dr. STEIGER. We have to get into that because that is where the system lives.

Mr. MILLER. Very good. Thank you.

Mrs. CHISHOLM. Thank you. Mr. Meeds and Mr. Hall, you entered a little late, and we do have another panel, but if you want to ask one question at this point, there is no objection whatsoever. Mr. Meeds?

Mr. MEEDS. Thank you, Madam Chairperson. I want to ask a question. I am sorry I missed your oral testimony, but I was very struck by the strong plugs I heard out there for health education, for nutritional education, and I just want you to know that we have a comprehensive health education bill this year, the Meeds bill, and we would appreciate your strong support of that.

[Laughter.]

Mrs. CHISHOLM. Mr. Hall?

Mr. HALL. Well, I missed so much, I guess the only suggestion I would have is that maybe you make a greater effort to get boys into home economics.

Dr. STEIGER. We would like to.

Mrs. CHISHOLM. Thank you very much for appearing before this subcommittee this morning.

At this point we are going to ask Mr. Raymond Parrott, executive director of the Advisory Council on Vocational and Technical Education, who will be accompanied by Ms. Vicky Rideout, senior, Silver Lake Regional Vocational High School, and Ms. Rosemarie Fabian, also a senior, Chelmsford Senior High School, to come forward.

You may proceed as you desire, Mr. Parrott.

**STATEMENT OF RAYMOND PARROTT, EXECUTIVE DIRECTOR, ADVISORY COUNCIL ON VOCATIONAL AND TECHNICAL EDUCATION, ACCOMPANIED BY VICKY RIDEOUT, SENIOR, SILVER LAKE REGIONAL VOCATIONAL HIGH SCHOOL AND ROSEMARIE FABIÁN, SENIOR, CHELMSFORD SENIOR HIGH SCHOOL**

Mr. PARROTT: Madam Chairperson and members of the subcommittee, before I get into my oral testimony. I did submit 35 copies as required of a more extensive testimony for the record. I would like to make two corrections in that.

On page 3 I attributed support to a Massachusetts bill, 622, to the board of education. That is in error. The bill, now chapter 622, was sponsored by the Speaker of the House, David Bartley, and I think he deserves credit for that.

On page 3, also in that same first paragraph. I said that the board of education in the Commonwealth was about to approve regulations concerning chapter 622. I think it is fairer to say at this stage that they are considering regulations because it has taken them almost as long to get to approve regulations as it has the Congress.

I would also be remiss, I think, if I didn't express to you a feeling that I am somewhat on a tightrope discussing sex discrimination and sex stereotyping, being male, being one of the majority of male executive directors of the State advisory council, and that I know just after the experience of less than 24 hours with the two students who are accompanying me that I am myself open to criticism on the basis of some of that which I do.

We went out to dinner last night and I guess in a typical male fashion I offered to order for them, and I was reminded that that wasn't perhaps the proper thing to do.

As we got into a cab to go back to the hotel, one of the windows in the rear of the cab was broken with a plastic fabric over it, and I did not sit next to it, and when I got in I apologized for not sitting over there. However, on that particular one, I did that because one of the students with me has a severe cold, and I felt that at least one can be gentle without being chauvinistic.

My name is Raymond Parrott. I am a resident of Concord, Mass., and for the past 24½ years have served as executive director of the Massachusetts Advisory Council on Vocational-Technical Education.

As you know, our activities are sanctioned under Public Law 90-576, with amendments, and operate in the Commonwealth as a result of Executive Orders 66 and 79. Our council is composed of 24 lay members, of whom 8 are women.

I will make no statement as to whether that is adequate representation or not, but it is higher than the national average.

I am pleased to appear before you today at the invitation of Congressman Carl Perkins, to address the issues and problems relating to sex discrimination and sex stereotyping in general, and as these subjects relate to occupational education in the Commonwealth in particular.

For the purposes of my testimony and supporting statements, I do not differentiate in this as to what is occupational education, what

is vocational education, or what is technical education. As you are probably well aware, these definitions differ from State to State.

My oral and written testimony have not been reviewed by the advisory council in its totality, but the views I express are based on research and observations by the council's staff, and has been incorporated in the last two annual reports submitted by the council to the Office of Education through the State Board of Education by unanimous vote.

After summarizing my testimony, I will be available to answer any questions the committee might ask, and I would also at the termination of my oral remarks like to comment on a couple of the questions that were raised before we perhaps establish a slightly different line of questioning, and I don't intend really to present a lot of statistics because these statistics are in my written testimony.

Within 6 weeks of assuming the position of executive director in December 1972, I planned a series of onsite visits to some vocational schools in Massachusetts. Visiting teams were composed of staff and council members.

Our visits initially were scheduled at the newer regional vocational-technical high schools, most built since 1962 in the Commonwealth. As an explanation of what these schools are, I think there is a difference nationally of what regional vocational schools are. In the Commonwealth these are really comprehensive high schools that are vocationally oriented. That is, a student enters in the ninth grade and spends 4 years at these regional vocational high schools, and the concern that our council has is that these do not appear to be very cost effective in terms of the adequacy of options open to most people, whether they be men or women, black or white, or handicapped or disadvantaged.

These schools all had heavy inputs of State and Federal funds and it was initially planned to encourage the growth of about 32 regional schools in the Commonwealth. There are currently 15 in operation. 3 more in various stages of development, and general moratorium now on further building.

I want to recall one visit to one of these schools. On that particular team were five council members, two women and three men, plus myself.

After observing the operations of the school, particularly those programs in the technical and heavy trade areas — auto mechanics, metal fabrication, carpentry, electricity — it became quite apparent that no women were in these programs.

This absence was noted by one of our women members who asked of the superintendent-director — the complexity of the name merely refers to the fact that each of these regional schools is a school district in the Commonwealth, so that the director of the school also is superintendent of the school district.

With hesitation, when responding to the question of why no girls, the superintendent responded. "You wouldn't want your daughter at that time of the month to climb ladders or lift heavy objects, would you?"

In visits to other schools, similar observations were noted, and similar questions were raised. While some of the answers were based on

is vocational education, or what is technical education. As you are probably well aware, these definitions differ from State to State.

My oral and written testimony have not been reviewed by the advisory council in its totality, but the views I express are based on research and observations by the council's staff, and has been incorporated in the last two annual reports submitted by the council to the Office of Education through the State Board of Education by unanimous vote.

After summarizing my testimony, I will be available to answer any questions the committee might ask, and I would also at the termination of my oral remarks like to comment on a couple of the questions that were raised before we perhaps establish a slightly different line of questioning, and I don't intend really to present a lot of statistics because these statistics are in my written testimony.

Within 6 weeks of assuming the position of executive director in December 1972, I planned a series of onsite visits to some vocational schools in Massachusetts. Visiting teams were composed of staff and council members.

Our visits initially were scheduled at the newer regional vocational-technical high schools, most built since 1962 in the Commonwealth. As an explanation of what these schools are, I think there is a difference nationally of what regional vocational schools are. In the Commonwealth these are really comprehensive high schools that are vocationally oriented. That is, a student enters in the ninth grade and spends 4 years at these regional vocational high schools, and the concern that our council has is that these do not appear to be very cost effective in terms of the adequacy of options open to most people, whether they be men or women, black or white, or handicapped or disadvantaged.

These schools all had heavy inputs of State and Federal funds and it was initially planned to encourage the growth of about 32 regional schools in the Commonwealth. There are currently 15 in operation, 3 more in various stages of development, and general moratorium now on further building.

I want to recall one visit to one of these schools. On that particular team were five council members, two women and three men, plus myself.

After observing the operations of the school, particularly those programs in the technical and heavy trade areas — auto mechanics, metal fabrication, carpentry, electricity — it became quite apparent that no women were in these programs.

This absence was noted by one of our women members who asked of the superintendent-director — the complexity of the name merely refers to the fact that each of these regional schools is a school district in the Commonwealth, so that the director of the school also is superintendent of the school district.

With hesitation, when responding to the question of why no girls, the superintendent responded: "You wouldn't want your daughter at that time of the month to climb ladders or lift heavy objects, would you?"

In visits to other schools, similar observations were noted, and similar questions were raised. While some of the answers were based on

what I would call old wives' tales, some were more realistic: "What garage will hire a woman auto mechanic? Parents don't want their daughters in typically male occupations."

I said these answers were more realistic, not more acceptable. The council soon after these visits decided as one of its evaluation priorities to focus on the issues of sex discrimination and sex stereotyping.

While the focus and resulting research indicated program bias toward males, the council's intent was and is the elimination of sex discrimination and sex stereotyping for both men and women.

Our 1973 annual report, under the caption "Status of Women in Occupational Education," backed up in my written testimony by appendix A--summary findings were:

Because a large-scale, federally funded study of occupational training opportunities for women is currently being conducted in Massachusetts, the council chose to defer its major action until the results of this study are available.

However, even a cursory look at this issue reveals considerable sex bias in occupational program curricula. Although women represent 55 percent of the occupational enrollment in Massachusetts, they are concentrated in a very narrow range of programs and often receive less complete training than for male programs.

In addition there is little evidence of real efforts by the State and local communities to open up programs typically serving only male students despite recent Federal and State legislation designed to effect this change.

And we recommended to the board at that time that the Division of Occupational Education, which is the administrative arm of the board -- that they take affirmative action to provide female students with adequate access to occupational education across the State, by eliminating sex bias in occupational curricula and sex stereotyping in vocational programming.

The concern of the council continued in fiscal year 1974 with more research time devoted to factfinding. This was because the study we have referred to was not going as rapidly as we thought it would.

Our research is presented in appendix B. In summary, we found sex stereotyping and sex discrimination remain critical issues in vocational schools and programs in spite of some action by the Department of Education and others.

In fiscal year 1973, of the 97 course offerings which prepared students for gainful employment, 52 had predominately or all male enrollments -- and by predominantly, we mean over 75 percent -- and 19 had predominantly or all female enrollments.

Technical, trade and industry, and agricultural subjects were primarily male. Health and homemaking occupational preparation were female, with only office occupations and distributive education attracting all students.

And the council recommended to the board that the board again take affirmative action to provide female students with adequate access to occupational education across the State, by eliminating sex bias and sex stereotyping.

I would be less than fair to suggest that the council is the key group interested in the elimination of sex bias in occupational education, or even the major group with these concerns. We are simply one group among many trying to change what is going on.

In 1971, the General Court of the Commonwealth passed an amendment sponsored by Speaker of the House David Bartley to chapter 76 of the general laws. This act, which will be, I think, described further by one of our students, is designed to prohibit discrimination in public schools, and is known as chapter 622. I have submitted that as appendix C.

The key thrust of the act was to create equal educational opportunity, and I am going to skip over some of this because, as I said, the students will discuss this.

I don't want to leave the impression that the fault or the solution to the elimination of sex discrimination and sex stereotyping lies with the occupational education system, or with education in general.

The problem is societal in scope and adequate redress must recognize that changes need to be made in the attitudes of parents, the responsiveness of business, industry, and labor through urging changes in labor laws, hiring habits, and through the initiation of affirmative action programs.

Nevertheless, I think we have to recognize that educational institutions at all levels are the most significant mechanisms in our society for the general process of socialization and decision-making effecting career choices and career motivation.

It appears reasonable, therefore, to work hard at correcting abuses in educational institutions through legislation and litigation, program regulations, and strong affirmative action programs.

I would like to conclude my summary remarks by quoting from the editor's note introducing "A Report on the Workshop on Women in Science and Technology". I was not able to get enough copies for the subcommittee, but I would like to leave the report in total as a further submission to back up my testimony. There are some very interesting comments on this MIT workshop.

Mrs. CHISHOLM. Certainly.

[Prepared statement of Mr. Parrott follows:]

PREPARED STATEMENT OF RAYMOND G. PARROTT, EXECUTIVE DIRECTOR, MASSACHUSETTS ADVISORY COUNCIL ON VOCATIONAL-TECHNICAL EDUCATION

Congresswoman Chisholm, members of the Subcommittee on Elementary, Secondary and Vocational Education:

My name is Raymond G. Parrott. I am a resident of Concord, Massachusetts and for the past two and a half years, have served as Executive Director of the Massachusetts Advisory Council on Vocational-Technical Education, sanctioned under Public Law 90-576, and operating in the Commonwealth as a result of Executive Orders 68 and 79. Our Council is composed of 24 lay members, of whom 8 are women.

I am pleased to appear before you today, at the invitation of Congressman Carl Perkins, to address the issues and problems relating to sex discrimination and sex stereotyping in general, and as these subjects relate to occupational education in the Commonwealth in particular. My oral and written testimony has not been reviewed by the Advisory Council in its totality, but the views I express are based on research and observations by the Council's staff, and has been incorporated in the last two annual reports submitted by the Council to the Office of Education through the State Board of Education by unanimous vote.

After summarizing my testimony, I will be available to answer any questions the committee might ask.

Within six weeks of assuming the position of Executive Director in December 1972, I planned a series of on-site visits to some vocational schools in Massachusetts. Visiting teams were composed of staff and council members. Our visits

initially were scheduled at the newer regional vocational-technical schools, most built since 1962. These schools had heavy inputs of state and federal funds, and it was initially planned to encourage the growth of about 32 regional schools. There are currently 15 in operation, 3 more in various stages of development.

I want to recall one visit to one of these new schools. On that particular team were five Council members, two women and three men, plus myself. After observing the operations of the school, particularly those programs in the technical and heavy trade areas (auto mechanics, metal fabrication, carpentry, electricity, etc.), it became quite apparent that no women were in these programs. This absence was noted by one of our women members who asked of the Superintendent-Director, why no girls? Without hesitation, the Superintendent responded — "You wouldn't want your daughter, at that time of the month, to climb ladders or lift heavy objects, would you?"

In visits to other schools similar observations were noted, and similar questions were raised. While some of the answers were based on "old wives' tales," some were more realistic: what garage will hire a woman auto mechanic? Parents don't want their daughter in typically male occupations. I said these answers were more realistic — not more acceptable. The Council soon after these visits decided as one of its evaluation priorities to focus on the issues of sex discrimination and sex stereotyping. And while the focus and resulting research indicated program bias toward males, the Council's intent was and is the elimination of sex discrimination and sex stereotyping for both men and women.

Our 1973 Report, under the caption "Status of Women in Occupational Education" (Appendix A), discussed the situation. Summary findings were:

Because a large-scale, federally funded study of occupational training opportunities for women is currently being conducted in Massachusetts, the Council chose to defer its major action until the results of this study are available. However, even a cursory look at this issue reveals considerable sex bias in occupational program curricula. Although women represent 55% of the occupational enrollment, they are concentrated in a very narrow range of programs and often receive less complete training than for male programs. In addition, there is little evidence of real efforts by the state and local communities to "open up" programs typically serving only male students, despite recent federal and state legislation designed to effect this change.

Recommendations to the Board of Education in 1973 were:

That the Division of Occupational Education take affirmative action to provide female students with adequate access to occupational education across the State, by eliminating sex bias in occupational curricula and sex stereotyping in vocational programming.

The concern of the Council continued in FY 74, with more research time devoted to fact finding, and working with other groups similarly concerned. Our research is presented in Appendix B, excerpts from our FY 74 Annual Report. In summary, we found:

Sex stereotyping and sex discrimination remain critical issues in vocational schools and programs in spite of some action by the Department of Education and others. In FY 73, of the 97 course offerings which prepared students for gainful employment, 52 had predominantly or all male enrollments and 19 had predominantly or all female enrollments. Technical, trade and industry, and agricultural subjects were primarily male, health and homemaking occupational preparation were female; with only office occupations and distributive education attracting all students.

And the Council recommended to the Board of Education:

The Board of Education take affirmative action to provide female students with adequate access to occupational education across the State, by eliminating sex bias occupational curricula and sex stereotyping in occupational programs.

I would be less than fair to suggest that the Council is the key group interested in the elimination of sex bias in occupational education, or even the major group with these concerns. We are simply one group among many trying to change what is going on.

In 1971, the General Court of the Commonwealth passed a Board of Education sponsored amendment to Chapter 76 of the General Laws. This act was designed to prohibit discrimination in public schools as is known as Chapter

622 (Appendix C). The key thrust of the act was to create equal educational opportunity. The Council's public statement at a January 10, 1974, public hearing relating to recommendations under Chapter 622 appears as Appendix D. The State Board of Education currently is about to approve regulations under Chapter 622, and to hold public hearings prior to adoption. As is the case with the promulgation of regulations under Title IX of the Education Acts of 1972, there is a painfully long time between enactment of legislation and the implementation of the Acts' intent. I guess that this further supports an old axiom: "change in a traditional society is considered illegitimate." To provide added data and insight into this important piece of State legislation, I have, as Appendix E, included an article on Chapter 622, appearing in the October 1974 publication of the Center of Law and Education, Harvard University, entitled "Inequality in Education." One of the co-authors is a Council member.

I don't want to leave the impression that the fault or the solution to the elimination of sex discrimination and sex stereotyping lies with the occupational education system, or with education in general. The problem is societal in scope, and adequate redress must recognize that changes need to be made in the attitudes of parents, the responsiveness of business, industry and labor through urging changes in labor laws, hiring habits, and through the initiation of affirmative action programs.

Nevertheless, I think we have to recognize that educational institutions at all levels are the most significant mechanisms in our society for the general process of socialization and decision-making effecting career choices and career motivation. It appears reasonable, therefore, to work hard at correcting abuses in educational institutions through legislation (and litigation), program regulations, and strong affirmative action programs.

I would like to conclude my summary remarks by quoting from the editor's note introducing "A Report on the Workshop on Women in Science and Technology" held at the Massachusetts Institute of Technology, Cambridge, Massachusetts, from May 21 to May 23, 1973:

"High school is the last formal education for most women. Regardless of whether they go directly to work after high school or pursue further education, they are likely to choose 'women's jobs.' Relatively few girls carefully consider their future careers and the full range of options. Unless they do so before the end of high school, women will continue to settle for lower status and achievement than men, and the situation will be worse for women from poor families who have little formal education. . . . I think that by now there is considerable consensus on developing greater opportunity for women. Everyone of us has been touched by some manifestation of the need — wives' or daughters' conflicts, the media, the political activity associated with the women's movement, the large number of women already in the work force, personal experience as women. What reservations persist often arise from genuine uncertainty about how to evolve strategy and tactics that will not adversely affect others — the rearing of children and family relationships, for example, or members of the current work force who must include new entrants. There is no such thing as a solution to such fundamental questions, rather they call for a continuous process of accommodation among individuals, institutions, and societal values."

I believe I have used more than my share of the time allotted to me. I will be happy to respond to any inquiries the committee may raise.

Thank You.

#### Appendix A

Source: *An Evaluation of Occupational Education in Massachusetts*. Fourth Annual Report, by the Massachusetts Advisory Council on Vocational-Technical Education.

#### STATUS OF WOMEN IN OCCUPATIONAL EDUCATION

##### 1. BACKGROUND

With the increasing recognition and legitimization of the Women's Movement, a considerable amount of attention is presently focused on women in education. Research is documenting what has long been felt by women — that discrimination on the basis of sex is a very real phenomenon. Sexism in education is pervasive and powerful; it stems from very deep roots.

Sexism begins with a child's earliest experience in the schools. Curriculum, teachers and textbooks seem to subtly transmit the fact that girls should be passive, dependent, and incompetent, while boys should be active, self-reliant, and successful.<sup>24</sup> These qualities generalize to the future career plans of both girls and boys. Girls are discouraged from becoming doctors, mechanics, electricians, and scientists, boys are discouraged from becoming nurses, secretaries, and nursery school teachers. This is a serious situation, for studies indicate that the degree of traditional sex stereotyping is quite strong by the time a child enters fifth grade.<sup>25</sup>

Once the child reaches secondary school, even more rigid sex stereotyping is evident. Sex bias in curriculum is potent, and boys and girls learn they are expected to develop different "aptitudes"—boys in math and science, girls in English and the arts. At this point, too, boys are usually encouraged to pursue "masculine" fields; girls are encouraged to follow "feminine" ones.<sup>26</sup>

Sex stereotyping is largely responsible for limiting the career aspirations of women, and occupational educators have done little, if anything, to reverse the situation. In fact, they have strongly reinforced the very rigid patterns of sex stereotyping. In a period when almost one-half the country's work force is comprised of women (a majority employed for economic reasons, not "pin money"), occupational education has the responsibility to adequately train women for the world of work. The educators must stop preparing women primarily for their roles as "homemakers" or "temporary" employees. They can no longer overlook the fact that more than 70% of all employed women are employed full-time and that the average woman has a full-time work life expectancy of 25 years.<sup>27</sup> It, therefore, becomes essential for schools to provide females with increased and diversified training, in areas that can yield fruitful and challenging careers.

The Federal Government, at last, has taken an affirmative stand on this issue. In June 1972, Title IX of Public Law 92-318 was enacted prohibiting any individual or institution benefitting from federal education aid to discriminate on the basis of sex either against students or employees. Federal education funds can be withheld if any institution fails to comply.

## 2. SITUATION IN MASSACHUSETTS

In August 1971, the Massachusetts General Court enacted Chapter 622 of the Acts of 1971, expanding a law against discrimination to include prohibition against sex discrimination in admission to public schools and in "obtaining the advantages, privileges, and courses of study offered by these schools." The law directly affected the many single-sex vocational schools throughout the Commonwealth as well as coeducational vocational high schools which often restricted particular courses to either male or female students.

A pre-legislation survey, conducted by the Office of the Speaker of the House, documented the need for such a bill. 265 questionnaires, focusing on several issues, were distributed to public senior and junior high school administrators throughout the State, including 90% of the vocational and regional high schools. The response rate was 63%. Among those responding were 19 boys schools, 4 girls schools, and 11 coeducational schools in which male enrollments were between 80 and 90%. Of the 11 coeducational schools, all were technical or vocational schools. Fifty-nine schools had mandatory courses for boys (industrial arts) and 52 schools had mandatory courses for girls (home economics). Fifty-seven schools prohibited boys from entering girls' courses, and 52 prohibited girls from entering boys' courses. When data for the regional vocational school was isolated, the picture was not much better.<sup>28</sup>

During the school year following the bill's enactment, the Governor's Commission on the Status of Women surveyed opportunities for women in vocational and academic education throughout the State. Although they did not conduct an

<sup>24</sup> National Organization for Women, New York City Chapter, Education Committee Report on Sex Bias in the Public Schools, 1971, page 15.

<sup>25</sup> Lynne B. Iglitzin, "A Child's Eye View of Sex Roles," *Today's Education*, Vol. LXI December 1972, pages 23-25.

<sup>26</sup> U.S. Office of Education, DHEW, Commissioner's Task Force on the Impact of Education Programs on Women, *A Look at Women in Education. Issues and Answers* for HEW, November 1972, page 4.

<sup>27</sup> Annual DOL averages for 1971 report that 71.8% of women 16 or older work full-time.

<sup>28</sup> This information was provided by Ms. Connie Kaufman, Office of the Speaker of the House.

in-depth assessment, their conclusions did suggest that despite legislation, 25% of the responding schools reported that both sexes were not admitted to all courses. Even when school administrators stated that classes or programs were open to both sexes, shop classes were largely male and home economics classes were largely female.<sup>20</sup>

In the fields of secondary and post-secondary vocational education, total places for men in public schools were almost three times the number of places for women. In the newly-constructed regional vocational schools, there were four times as many places for men, in the terminal-occupational courses in Massachusetts Community Colleges, there were 40% more places for men, and in vocational schools linked with high schools, there were four times as many places for men. However, in the business courses women were the majority group, by a four to one ratio.<sup>21</sup>

Not only did most places report less enrollment for women, but, as often is the case, "separate did not mean equal." Boys schools or courses tended to be more diverse and led eventually to better paying jobs. On a statewide level, vocational training channelled women into clerical and low-paid service work while men were trained primarily as craftsmen, managers, and bluecollar workers.<sup>22</sup>

A comparison between Boston's two trade high schools, one for each sex, resulted in similar, though more detailed, findings. According to 1970 statistics, women accounted for only 39% of the students enrolled in the vocational schools. Trade High School for Girls had a 55% lower capacity than Boston Trade School (for boys). Recruiting methods at the girls school were either nonexistent or different ("less aggressive"); and whereas the male students were provided a choice of 12 courses, female students had a choice of only four offerings. Non-vocational course offering were likewise determined by sex. At Trade High School for Girls, students took typing and merchandising, at Boston Trade, boys learned geometry, trigonometry, and physics. Females could take biology, boys were offered chemistry. The average expected wage for women was 44% less than for the trades available at the boys school. Unfortunately, the list of differences is long, most indicating that women are occupying inferior positions.<sup>23</sup>

Data generated by the State Division of Occupational Education appear to present a far more optimistic view. According to their position, women certainly are treated fairly. They are reported, in fact, to represent 55% of the occupational education population. In terms of official statistics, this may be true. With some analysis, however, it proves to be misleading. Enrollments of female students are primarily in traditionally female programs—home economics, office occupations, and distributive education. In trades and industries, for instance, women comprise only 9% of the enrollment. Similarly, their percentage in technical programs is very small, approximately 4%.<sup>24</sup>

It appears that female students are receiving training almost exclusively in areas which provide poor wages, few opportunities for advancement, and minimal challenge. In addition, their training is rarely as "complete" as that offered in male-dominated programs. Statistics in traditionally female fields often represent students who are taking a few specific courses rather than students who are participating full-time and will be prepared for entry level positions upon graduation. Preliminary study also indicates a lack of programs for the large number of women who are reentering the job market. This particular population has some very serious and unique needs which must be identified and met. For instance, vocational guidance and/or career education is most essential and must be integrated into curriculum. The community colleges and evening programs of local school districts would be appropriate settings for this effort.

The Division does not appear to be making an effort to "open up" programs typically serving male students.<sup>25</sup> While overt discrimination against female

<sup>20</sup> Blanche, Fitzgerald, Ph.D., Governor's Commission on the Status of Women, *Report of the Task Force on Education, 1971-72*, page 1.

<sup>21</sup> *Ibid.*, page 4.

<sup>22</sup> *Ibid.*, page 4.

<sup>23</sup> Cell Brian, *Discrimination on the Basis of Sex in Occupational Education in the Boston Public Schools, 1972*. Although the data represented the year prior to the bill's passage, few changes have occurred.

<sup>24</sup> The Commonwealth of Massachusetts, Division of Occupational Education, Research Coordinating Unit, *Selected Data from the Annual Federal Occupational Report, FY 1972*, page 8.

<sup>25</sup> The Council is aware of efforts by the Minuteman Regional Vocational School (in process of construction) to resolve this problem. A subcommittee of their Advisory Committee is addressing the role of female students in occupational education. This, however, is viewed as local rather than State action.

students is not apparent, there are no services to encourage female students to seek better opportunities in the traditionally male courses. Guidance, a particularly crucial activity, has not been made a priority; hence, there is neither support for a female student who wishes to enter a "male" program nor counseling for a woman who returns to school after many years. There is no evidence of a concentrated effort for recruitment of female students or development of reserve training programs focusing on sexism within the schools. Similarly, there has been a lack of publicity concerning state and federal legislation. The Council believes strongly that female students have received inadequate access to occupational education programs and the Division has been slow in changing this situation.

### 3. FUTURE

The present status of women as students of occupational education has by consequence only been superficially discussed in this report. An extensive evaluation of the situation has been funded federally through the National Institute of Education and will enable two lawyers from the Boston area to examine more precisely the effect that state legislation "C22" has had on female students in Massachusetts. The Council has deferred more extensive assessment and recommendations pending a review of the study's results. Among other aspects, the study will review the response to legislative efforts by examining:

- Institutional reaction (response at administrative and operational levels in 35 schools)

- Community reaction (overt reactions to the law within relevant governmental institutions and the community-at-large)

- Contributing factors (other possible causes of a changing climate for girls' vocational education)

The Council has met with the sponsors of the evaluation project and will cooperate by providing supportive and technical assistance upon request. The Council believes that the status of women in vocational education needs further exploration and views the NIE study as potentially providing valuable insights to enable more effective Council action.

### THE HANDICAPPED AND THE ELDERLY

Specific focus on some issues and concerns of interest to the Council in this chapter precludes elaboration on others. Absence of others does not mean they are less important but rather a recognition of the need to balance concerns with resources.

Two other issues are worthy of brief mention as they will be studied in-depth early in 1974:

#### 1. HANDICAPPED PROGRAMS

The Council remains concerned that little progress has been made in delivering services to the handicapped. There are some excellent programs, such as the program for the deaf at Blue Hills; and the Division has demonstrated its interest by using P.L. 90-576 funds in Project Career, a component of which is the identification of work opportunities for the handicapped. However, several problems are evident:

### Appendix B

Source: Massachusetts Vocational-Technical Education, 1974, Fifth Annual Report, of the Massachusetts Advisory Council on Vocational-Technical Education

### CHAPTER III, SPECIAL INTEREST AREAS

#### A. INTRODUCTION

From issues and concerns identified and discussed broadly in last year's Report, the Council selected special issues for review during FY 74. The Status of Women in Occupational Education and Boston: Urban Concerns received further exploration this year. As minimal response resulted from the Council's 1973 recommendations, they stand unchanged and accompanied by a request for reconsideration by the appropriate decision makers. Status reports are included in this chapter.

The issue of access to vocational schools across the Commonwealth is addressed with particular emphasis on students who are racial minorities. While only preliminary study has taken place, there seems to be reasonable evidence to suggest that occupational training opportunities are being denied to them. So complex and serious is this issue that the Council has assigned it as a priority area for FY 75. While specific recommendations are withheld pending further analysis and activity, a strong recommendation is directed toward the Board of Education and the Division of Occupational Education to provide immediate and priority attention to the situation.

Programming (or lack of programming) for the disadvantaged and handicapped is briefly touched upon in this chapter, with a discussion of the effective use of mandatory set-asides. Although further work by the Council in this area is planned for FY 75, an initial discussion of the problem is presented.

Proprietary schools, and their role in the vocational education system, are also given attention. A short discussion of noteworthy research is included.

The Council's strong interest in the above issues is shared by other individuals and groups with whom Council staff and members have met periodically to provide data and discuss action. Two recent studies on access to vocational education have been conducted: *The Impact of 622 (Sex Discrimination Legislation) on Vocational Education in Massachusetts* sponsored by the National Institute of Education (NIE) and *Vocational Education in the Commonwealth* researched by Mass Advocacy Center. While the NIE study has not been completed, some data and findings were shared with the Council and appear in the following section. Mass Advocacy was not able to furnish the Council with final materials, however, there were several joint staff meetings to discuss endeavors during the past year. It is anticipated that the Council will develop position papers in response to both these publications at a later date.

#### B. STATUS OF WOMEN IN OCCUPATIONAL EDUCATION

##### 1. Overview

The 1973 Annual Report synthesized much of the data and material that has been published about sex stereotyping and discrimination in occupational education throughout the Commonwealth. While only a preliminary assessment was conducted, the Council recognized that despite the passage of Chapter 622 in the Massachusetts Acts of 1971 and Title IX of the Federal Education Amendments of 1972, few efforts focused on the provision of equal access and opportunities for female students in Massachusetts.

This past year, in contrast, was characterized by increased institutional support and responsiveness to the situation. In March, the Board of Education adopted Recommendations for Implementation of 622 which addressed admission policies, entry into courses, guidance practices, course content and materials, extracurricular and athletic activities, and roles and functions of schools and system administrators. Although the recommendations were accepted only for advisory use, the Board did vote to reconsider them as regulations in March, 1975. The Bureau of Equal Opportunity Education also included in its FY 75 budget funding for two staff people to provide assistance and advice to local school systems implementing 622. One person was hired to survey system-wide practices and establish regional 622 advisory committees, with particular emphasis on vocational education. There is good cooperation between that office and the Advisory Council.

The Division of Occupational Education has appointed a 622 liaison. While the position is not full-time, the appointment does represent a first step in addressing the problem of sex stereotyping and discrimination. In April the Associate Commissioner circulated a memorandum to vocational administrators across the Commonwealth acknowledging the passage of 622. Presently, however, the Division has developed neither an official policy statement nor specific guidelines for implementing the Board's recommendations.

Beyond the Department of Education, there is evidence of substantial activity. The Massachusetts Commission Against Discrimination has considered a Commission-initiated complaint against Blackstone Valley Regional Vocational-Technical School based on the school's alleged refusal to admit girls to its program. The Commission's jurisdiction over this issue is based on 2A of Chapter 151C of the General Laws which prohibits any vocational training institution from discriminating on the basis of sex in admitting students or in providing benefits, privileges and placement services. The Commission found the

facts to be as alleged, and has ordered the school to cease discrimination and take far-reaching remedial action to overcome the effects of its past practices.

Federal regulations to implement Title IX are also in the process of being developed and final regulations are expected to be promulgated early in 1974. One of the proposed regulations provides that a recipient of federal financial assistance "which has previously discriminated against persons on the basis of sex in an education program or activity, shall take such remedial action as is necessary to overcome the effects of such previous discrimination." Documentation of segregation in vocational schools in the past may lead to the formulation, articulation and implementation of remedial and affirmative action programs within the new few years in vocational schools across Massachusetts.

There are trends on other governmental levels which ultimately will also affect the Commonwealth's occupational education system. The area of apprenticeships, for instance, is receiving considerable national attention. A three year project in Wisconsin funded by the Labor Department, isolated, analyzed and tried to minimize barriers to the participation of women in the skilled trades. Very sound findings and recommendations were developed and directed toward various institutions and agencies, among them public vocational schools and programs.

As a result, Boston has been one of six urban areas selected by the Department of Labor to initiate the opening of unions and apprenticeship programs to women. Joint sessions between the Labor Department's Women's Bureau and business, industry and labor unions are planned for Fall of 1974. The anticipated outcome is the recruitment and placement of women in apprenticeship and on-the-job programs. Such results hopefully will provide pragmatic incentives for vocational schools to begin offering pre-apprenticeship courses to female students in the skilled trades and crafts. The Council has initiated contact with the Bureau and will oversee their efforts.

## 2. Situation in Vocational Classrooms<sup>1</sup>

In FY 73, as in previous years, more females than males are enrolled in federally-recognized vocational education programs in Massachusetts. Statistics, in fact, indicate that there are 77,409 male and 104,634 female students. A very significant issue become where or how these large numbers of female students are participating in the vocational system. From slightly a different perspective, the issue can be defined as whether the range of vocational education opportunities available to female students is equal to the range of opportunities available to male students.

Data showing the clustering characteristics of students by course offering and sex provide some very useful insights and information. For instance, ninety seven course offerings, which prepared students for gainful employment were available in FY 73. (This excludes consumer, homemaking and typing courses which are not full-time programs leading to employment). There were 62,701 females and 69,045 males enrolled. The courses are categorized by field as follows:

- Agriculture (5)
- Distributive Education (20)
- Health (7)
- Homemaking Occupational Preparation (6)
- Office Occupations (8)
- Technical Occupations (9)
- Trade and Industrial subjects (30)

Enrollments in these courses reflect marked patterns.

- 15 courses all male.
- 26 courses at least 90 percent male.
- 11 courses at least 75 percent male.
- 2 courses all female.
- 14 courses at least 90 percent female.
- 3 courses at least 75 percent female.

The 52 predominantly or all male courses enrolled 42,756 males and 1,617 females, the 19 predominantly or all female courses enrolled 35,082 females and

<sup>1</sup> Data in this section was developed by the NIE Study staff for inclusion in the Council report. Their primary source for data is the Division of Occupational Education's *Annual Report, FY 73*. All figures include secondary, post-secondary and adult students.

3,134 males. This indicates that 60% of the students in Massachusetts vocational education programs receive training under circumstances which reinforce the stereotype that there is a link between the sex of the student and the occupational training being given.

There are fewer sex-linked courses<sup>2</sup> for girls, 19 as compared to 52 for boys. Moreover, one of the nineteen courses—stenographic secretarial and related skills—enrolls 15,852 of the females, thereby concentrating 27% of the females enrolled in vocational education programs in a single course offering. There is no male concentration which even remotely resembles this.

The clustering of students by sex in each of the course offerings establishes the sex-linkage accorded the seven fields of vocational education:

Technical subjects—MALE—

9 are male-linked.

Trade and Industrial subjects—MALE—

32 are male-linked.

2 are female-linked.

5 are neutral.

Agriculture—MALE—

5 are male-linked.

3 are neutral.

Health—FEMALE—

6 are female-linked.

1 is neutral.

Homemaking Occupational Preparation—FEMALE—

5 are female-linked.

1 is neutral.

Office Occupations—NEUTRAL—

5 are neutral.

3 are female-linked.

Distributive education—NEUTRAL—

12 are neutral.

7 are male-linked.

1 is female-linked.

In addition, the type-of-school distribution in Massachusetts of the course offerings, insofar as that can be determined, suggests that the male-linked courses may be receiving the major share of resources in terms of capital expenditures and operating outlay per student:

Regional vocational-technical schools: Secondary Offerings:<sup>3</sup>

Male-linked courses.....	84
Female-linked courses.....	5
Neutral courses.....	11

And finally, the programs in which females are found are consistently those at the low end of the scale of anticipated earnings of vocational school graduates. There appears to be an unmistakable correlation between the "maleness" or "femaleness" of a course and the income potential of the occupation being trained for, only males are found in plumbing and masonry courses, only females are learning to be power stitchers.

These segregated patterns—appearing in courses of study and reinforced by the combinations of courses offered in particular physical facilities—seem to be taken as one of the immutable facts of life in Massachusetts. Blue Hills Regional School expansion is justified to the community as enabling the school to provide "exciting new career options for girls"; the Blackstone Valley Regional School Superintendent-Director publicly claims that his school—which opened its doors in 1968—was built for boys only; and Publication MOVE (Massachusetts Opportunities in Vocational Education) describes seventeen trade and industrial subjects as being "primarily for boys," four as being courses which "attract primarily girls" and then concludes by noting that "some courses such as Food Trades have both boys and girls."

These illustrations serve well to identify some of the real inequalities that permeate occupational education opportunities for female students. It becomes clear that girls seeking to prepare for employment are not participating in the

<sup>2</sup> "Sex-linked" refers to those courses with enrollments which are 75% or more of one sex. "Neutral" indicates that neither sex constitutes 75% or more of the enrollment.

<sup>3</sup> This information is contained in a September, 1970 listing prepared by the Division of Occupational Education.

broad range of options theoretically available to them in Massachusetts vocational education programs, and are instead clustering in the courses of study offering the least economic potential.

### 3. Recommendation

The thrust of the State must now shift to corrective action. Therefore, the Council strongly reinforces its FY 73 recommendation and continues to recommend that:

The Board of Education take affirmative action to provide female students with adequate access to occupational education across the State, by eliminating sex bias in occupational curricula and sex stereotyping in occupational programs.

Specific steps for implementing this recommendation will be included in the upcoming NLE study, the result of intense and far-reaching data collection and analysis. The Council urges the Board of Education and the Division of Occupational Education to carefully review and consider the study's findings and recommendations and respond sensitively and expeditiously to the expressed issues and concerns.

## Appendix C

### 1971 REGULAR SESSION — PUBLIC SCHOOLS — DISCRIMINATION PROHIBITED

#### CHAPTER 622

An Act to prohibit discrimination in public schools.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

Section 1. Chapter 76 of the General Laws is hereby amended by striking out section 5, as appearing in the Tercentenary Edition, and inserting in place thereof the following section:

Section 5. Every child shall have a right to attend the public schools of the town where he actually resides, subject to the following section. No child shall be excluded from or discriminated against in admission to a public school of any town, or in obtaining the advantages, privileges and courses of study of such public school on account of race, color, sex, religion or national origin.

Section 2. Section 16 of said chapter 76, as so appearing is hereby amended by inserting after the word "schools", in line 2, the words:— or from the advantages, privileges and courses of study of such public schools.

Approved August 5, 1971.

## Appendix D

### COUNCIL STATEMENT FOR PUBLIC HEARING, JANUARY 10, 1974

Mrs. Kipp, The Massachusetts Advisory Council on Vocational-Technical Education wishes to present the Council's response to the Proposed Recommendations for Access to Equal Educational Opportunity via Implementation of Chapter 622.

As the Council has a role limited to occupational education, Council remarks are directed at the effect of Chapter 622 solely within that sphere of education. The Council's remarks are based primarily on the evidence and documentation that appears in the Council's Fourth Annual Evaluation Report, distributed recently to the Board. It is with enthusiasm that the Council commends the Board for attempting to provide equal opportunity not only to female students but also to the many other groups frequently labelled as "minority."

Chapter 622 addresses an issue that has concerned the Council for some time. State statistics indicate that female students at a secondary level represent approximately 55% of the occupational education population; this figure is often cited as evidence the State is programming effectively for women. With some analysis, however, it proves to be a misleading indication with respect to the level of and breadth of occupational programs open to women. Enrollments of female students are primarily in traditionally female programs—home economics, office occupations, and distributive education—and in terms of student contact hours, do not equate to the programs offered to men.

Historically, female students have received training almost exclusively<sup>1</sup> in areas which provide poor wages, few opportunities for advancement, and minimal challenge. In addition, their training is rarely as "complete" as that offered to students in male-dominated programs. Statistics in traditionally female fields often represent students who are taking a few specific courses rather than students who are participating full-time and will be prepared for entry level positions upon graduation. Some progress is evident but the Council looks to Chapter 622, and the action it will stimulate, to encourage more equitable and reasonable programming.

While the Department of Education and the Division of Occupational Education appear to be making an effort to "open up" programs typically serving male students, services should be provided to encourage female students to seek better opportunities in the traditionally male courses. Guidance, a particularly crucial activity, should be attuned to the particular and specific problems of women and should be given the priority the Council believes essential. There should be a concentrated effort for recruitment of female students and development of in-service training programs focusing on resolving problems of sexism within the schools. Similarly, state and federal legislation directed toward improvement should be adequately publicized. The Council believes that female students should receive adequate access to occupational education programs.

In this year's Annual Evaluation Report, the Council recommended "that affirmative action be taken to provide female students with adequate access to occupational education across the State by eliminating sex bias in occupational curricula and sex stereotyping in vocational programming." The Council, therefore, supports and urges the acceptance of the guidelines prepared by the Ad Hoc Committee, especially those pertaining to school admission, course admission, and guidance services. Major comments on procedures for implementation are withheld until the 11 member committee, to be appointed by the Commissioner, has the opportunity to develop them more specifically.

At this time, the Council offers these specific observations on the proposed guidelines:

1. Most recommendations focus on the local schools and districts, rather than the Department of Education. If they are to be responsible for implementation of 622, the State should service them with technical and financial assistance. The Council suggests that at least one person from the Bureau of Equal Educational Opportunity be assigned as a field person to work with school districts on implementation of the legislation.

2. There seem to be overlapping areas of responsibility and functions between principals and superintendents.

3. There are several women's centers across the State (Everywoman's Center in the West; Women's Opportunity Research Center in the East; etc.) who have developed techniques for in-service training, have worked on alleviating sex stereotyping in schools, etc., and their skills should be utilized rather than creating a new group within the Department of Education to perform this function.

In conclusion, the Council awaits with concern and interest more detailed information on costs, specific lines of responsibility, methods for increasing enrollment in vocational programs, and expanded use of school facilities, and pledges its support for effective change.

## Appendix E

### CHAPTER 622. ONE STATE'S MANDATE

(By Regina Healy and Diane Lund) \*

"On August 5, 1971, the Governor of the Commonwealth of Massachusetts signed a measure which outlaws discrimination on account of sex in the public schools of the state.<sup>1</sup> In this age of antidiscrimination agencies and affirmative

\* Regina Healy is Commissioner of the Massachusetts Commission Against Discrimination. Diane Lund is teaching at the Harvard Law School. Both authors are members of the Massachusetts Bar and former employees of the Massachusetts Law Reform Institute.

<sup>1</sup> Mass. Acts & Resolves, 1971, ch. 622, amending Mass. Gen. Laws ch. 76, Sections 5 and 10.

action programs, the form which the new statute took may appear anomalous to some in its simplicity:

No child shall be excluded from or discriminated against in admission to any public school or any town, or in obtaining the advantages, privileges and courses of study of such public school on account of . . . sex . . .

Chapter 622, as it has come to be known, was the first anti-sex discrimination legislation of its kind in the country. The questions asked most often about it are why this form of legislation was chosen and how the law is working in practice. This article attempts to supply some answers to those inquiries.

#### HISTORY OF CHAPTER 622

The concept of Chapter 622 was developed during a 1970 meeting of a group of feminists<sup>1</sup> whose particular concern was whether state legislation could be an effective means of improving the economic position of women. Many of the people in attendance were connected with legal services offices or other agencies serving the poor. All were aware of the statistical position of women in Boston: a 1965 sample of Boston households indicated that 31.7 percent of all families were headed by women;<sup>2</sup> and all studies of AFDC recipients, male-female income levels, comparative earning power and the like established that families headed by females were likely to be poor.

Hence the issue was whether something could be done through legislation to make it more likely for a woman heading a family unit to earn enough to support herself and her family. The operation of public schools was a logical starting point in this consideration. The group shared information about Massachusetts high schools which only admitted boys and which were the only school in the community to offer preparatory programs in skilled trades such as carpentry, plumbing and electrical work. The consequences for a child's vocational aspirations of being assigned to a cooking class or a wood-working class solely on the basis of sex were discussed. The outcome of all this talk was general agreement on a proposal for action, a successful effort to enlarge educational opportunities for girls could be one likely way of ultimately increasing the earning power of women. Thus the idea of Chapter 622 evolved.

#### LEGISLATIVE FORM

The form of the legislation clearly was of prime importance. In retrospect the choice made seems to have been a particularly fortunate one. At the time, however, the phraseology of the bill was dictated more by a pragmatic view of the political realities than by any thoughtful weighing of the comparative virtues of the alternatives. The realities are easy to enumerate: the proponent group had no connections to the educational bureaucracy of the Commonwealth, and therefore no hope of obtaining official sponsorship for the proposal; the deadline for filing legislation was close, making it unlikely that substantial community involvement with the bill could be obtained prior to its filing; the Commonwealth, as usual, had no money to spend, and no one was solidly informed about the educational processes which were intended to be affected by the bill.

All of these considerations argued for generalities rather than specifics, and for generalities, moreover, which would address the problem at no apparent cost to anyone. It seemed politic under these circumstances to make what would appear to be an acceptably modest beginning, a simple statutory guarantee that sex should not be a determinant of access to educational programs.

The model for such a law was already available to the drafters of Chapter 622. The chapter of the General Laws dealing with compulsory school attendance<sup>3</sup> had a section describing which schools a child required to go to school had a right to attend.<sup>4</sup> That section included language, added just prior to the Civil

<sup>1</sup> The full text of the law, following the 1971 amendment, protects against discrimination "on account of race, sex, color, religion or national origin." Both sex and national origin were added to the list of protected characteristics by the 1971 legislation.

<sup>2</sup> The idea for the meeting originated with author Healy and Martha Davis, both of whom were then working at Massachusetts Law Reform Institute, an OEO-sponsored agency responsible for statewide legal services projects.

<sup>3</sup> 1948 Statistics of Boston's Population. Action for Boston Community Development, Inc., Boston, Mass.

<sup>4</sup> Mass. Gen. Laws ch. 76.

<sup>5</sup> This provision, which appears as Section 1 of the chapter, was probably intended to fix and limit rights rather than to extend them, that is, its purpose is to identify the pupils which the local municipality must provide educational services for, and by doing so, to make it clear that no one outside the described geographical boundaries has any entitlement.

War,' which protected a child from being excluded from a public school on account of his or her race, color or religious opinions.

Further, a subsequent section of the chapter created an individual right of action to redress an unlawful exclusion from school. The wrongdoing town was made liable to pay money damages.<sup>7</sup> This almost ideal legislative scheme offered the added attraction of support for the assertion that the current proposal was no more than an extension of the protections already guaranteed to other groups under Massachusetts law. However, the existing provisions, dealing only with exclusion from school, were not broad enough. The law did not address the problem of assigning children to practical skills courses on the basis of sex, differing levels of expenditure, unequal physical facilities and distinctions drawn when job interviews were being held or scholarships awarded.

The drafters of Chapter 622 provided the essential broader protection by means of a key phrase. No child shall be excluded from or discriminated against in . . . obtaining the advantages, privileges and courses of study of such public school . . . (emphasis added). This language offers possibilities for comprehensive interpretation but it does so in an unobtrusive fashion. Although a vehemently opposed legislator might have used those terms to conjure up mixed laboratory scenes as an argument against passage, the wording of the bill did not invite this tactic.<sup>8</sup>

The proposed legislation in this no-cost equal opportunity sheepskin attracted the interest, and ultimately the vigorous sponsorship, of the Speaker of the Massachusetts House of Representatives, David M. Bartley. Ann Gannett and Mary Fantasia, two women members of the House, joined him as co-sponsors.<sup>9</sup> The Speaker's support was undoubtedly a key factor in the passage of the bill. He utilized the resources of his office to conduct a survey which elicited one hundred and sixty five responses from schools across the Commonwealth and documented the existence of single-sex schools, single sex courses and unequal athletic programs.<sup>10</sup> This material was presented at the public hearing on the bill together with testimony describing the plight of Massachusetts families headed by women whose educational experience prepared them for dependency rather than self-sufficiency.

The proposed legislation would require a local public school to admit children without regard to their race, color, sex, religion or national origin. Once admitted the school would be further prohibited from discriminating on the basis of race, color, sex, religion or national origin in the offering of advantages, privileges, and courses of study.

The shortcomings of the present statute fall into two main categories. First, while discrimination on the basis of race, color and religion in admission to public schools is prohibited, discrimination on the basis of sex and national origin is not. The second problem with the present law is that once

<sup>7</sup> Mass. Acts & Resolves, 1855, ch. 256.

<sup>8</sup> Mass. Gen. Laws ch. 76, Section 16.

<sup>9</sup> In only two of the fully reported cases arising under Section 16 of the Chapter 76 has the plaintiff prevailed. In the first of these, *Morrison v. City of Lawrence*, 181 Mass. 127, 63 N.E. 400 (1902); 186 Mass. 458, 72 N.E. 91 (1908), the student was accused by the principal of the high school of inciting other students to write articles for a local newspaper which were critical of the principal. The newspaper was published by the student's father. Eventually the student was expelled and an action was brought to recover damages. The jury found in the student's favor but the Supreme Judicial Court ordered a new trial on the ground that the trial judge erroneously refused to instruct the jury to disregard evidence of the costs of attending school elsewhere (since the student did not show these to be personally incurred by him). At the second trial the jury returned a verdict for the sum of \$750 and this time defendants' exceptions were overruled on appeal. *Carr v. Inhabitants of Dighton*, 224 Mass. 304, 118 N.E. 525 (1918), involved suspension of three children in a family on account of head lice, followed by an unsuccessful effort by their parent to obtain a hearing. The jury found for the plaintiffs, apparently concluding on the particular facts that the exclusion from school was not made in good faith, and awarded each child \$100. The verdicts were upheld on appeal.

<sup>10</sup> A variation of the bathroom argument was made in the subsequent legislative session when bills designed to save all-male Boston Latin School from Chapter 622 were being considered. The contention was that the Latin School building couldn't accommodate females because there weren't enough of the "right kind" of facilities. See note 28 *infra*.

In 1971 the 240-member Massachusetts House of Representatives (the largest in the country) contained four women.

<sup>11</sup> Of the schools responding, 19 reported themselves as admitting only boys and 4 as admitting only girls. 57 of the responding schools refused to permit boys to take home economics courses. 52 of them refused to permit girls to take shop courses. 86 of the 117 coeducational schools furnishing information to the survey reported that they provided more athletic opportunities for boys than for girls whereas 9 of these had more athletic opportunities for girls than for boys.

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admitted, there is no prohibition against discriminating against a child in the courses of study and other opportunities available to him. Thus while girls are admitted to educational schools, they are often denied the opportunity to train for jobs which will support them and their possible future families. The presumption that these families will be supported by a male wage earner is no longer valid. AFDC figures show that 31.7 percent of all Boston families are female headed.

In many vocational schools in Massachusetts boys learn electronics and carpentry while girls learn only homemaking. While homemaking is a very useful skill, it should not be the only alternative open to students. One third of all female workers in the United States work in service and sales occupations with median income ranging from \$1,267 for private household workers to \$3,143 for sales workers. In fact the U.S. Department of Labor states that even if free day care were available, more than two thirds of all AFDC mothers would be unable to support their families even at a public welfare level. Under the proposed legislation all those who meet the standards set by school committees would be able to acquire much needed skills without regard for their race, color, sex, religion or national origin.

The logic thus given to the legislation proved to be persuasive. The bill encountered no significant opposition in either house and was enacted with little furor and no fanfare.<sup>14</sup>

We have suggested that the access-to-education model used for Chapter 622 was chosen for political reasons. While this is true, it is not the whole truth. Political considerations determined the outcome of the initial choice between programmatic legislation, intended to produce systemic change by making funds available for new ways of doing things, and minimum-standards legislation, intended to produce systemic change by mandating it. The proponents of the bill did not have the backing, expertise or influence to put through legislation calling for the expenditure of state monies. But within the parameters of the minimum-standard option, the decision on the enforcement mode, while requiring some recognition of political realities, did not turn on them.

In broad terms, the alternatives for enforcing the minimum-standard legislation were: (1) enforcement through the internal procedures of the extant education system; (2) antidiscrimination agency enforcement; and (3) enforcement initiated, processed, and if necessary, litigated through individual complaint. It seems probable that a similar set of options exists in all states, and thus that our analysis of each is generally relevant.

#### STATE EDUCATION ENFORCEMENT

In Massachusetts, enforcement of laws related to education had most often fallen under the responsibility of the internal workings of the various levels of the state educational bureaucracy (e.g., State Board of Education, State Commissioner of Education).<sup>15</sup> However, the sanction of withholding funds,<sup>16</sup> the method designated for enforcement action, is not usually relied upon in actual

<sup>14</sup> Testimony of Regina Healy before the Joint Committee on Education of the Massachusetts Legislature, March 22, 1971.

<sup>15</sup> Both of Boston's major newspapers reported the Governor's action in signing the Bill into law. The *Herald* report included a statement from Speaker Bartley's office that the legislation was designed primarily to open to girls vocational opportunities traditionally limited to boys, followed by the Associate Commissioner for Vocational Education's comment that he didn't expect the law to have a major impact since "it was simply confirm what many schools are already doing." *Boston Herald*, Aug. 10, 1971.

<sup>16</sup> The controlling statutory provision is found in Mass. Gen. Laws ch. 15, section 1G, the section describing the responsibilities of the State Board of Education. One paragraph of that section reads:

The board shall see to it that all school committees comply with all laws relating to the operation of the public schools and in the event of noncompliance the commissioner of education shall refer all such cases to the attorney general of the Commonwealth for appropriate action to obtain compliance.

A second string to the Board's bow is provided by an earlier paragraph in the same section.

The board may withhold state and federal funds from school committees which fail to comply with the provisions of law relative to the operation of the public schools or any regulation of said board authorized in this section.

State educational agency enforcement does appear to be an appropriate means of obtaining compliance with statewide policies on the part of operating educational systems which are subject to local control. Mass. Gen. Laws ch. 40, Section 1 requires every town at its annual meeting to elect specified town officers, including members of the school committee. The duties of a school committee, as prescribed by Mass. Gen. Laws ch. 71, Section 27, are "to have general charge of all the public schools. . . ."

<sup>17</sup> Mass. Gen. Laws ch. 15, Section 1G, quoted in note 15 *supra*.

practice." Even if withholding funds were more frequently practiced, its effectiveness is questionable since local communities in the Commonwealth bear the major burden of financing their schools and some could probably scrape along without state aid if they chose to in order to avoid compliance.<sup>1</sup> Although there have been two statewide directives in recent years which have aroused controversy and local resistance,<sup>2</sup> they have not resulted in the sanction of fund withholding. Local schools must often reach a mutually agreeable compromise resolution with the educational bureaucracy.<sup>3</sup>

Additionally, if there is a large gap between the legislative vision behind a minimum-standard law and the operational realities existing in the schools, the law may never cast any noticeable shadow upon local schools. In such cases, the state educational agency simply chooses not to enforce the legislature's directive.<sup>4</sup> The drafters' concern with the potential gap between the mandate and state agency enforcement activities led them to decide against proposing to make a state educational agency responsible for enforcement.

#### ANTIDISCRIMINATION AGENCY ENFORCEMENT

The choice to lodge enforcement responsibility in a state antidiscrimination agency may not be available in every state.<sup>5</sup> when it is, the alternative requires thoughtful consideration. One traditional rationale for giving jurisdiction to a state agency in this kind of circumstance is the assumed greater power the state has to effectively deal with violations of the law. The implication, of course, is that the protected individual or group, acting alone, is relatively powerless. This reasoning, however, is not necessarily accurate when applied to sex discrimination in the public educational context.

It must also be recognized that agency enforcement calls for the use of state resources. Unless new money is requested in connection with the bill proposing to give jurisdiction to the state antidiscrimination agency, implementation of the law, once the legislation is enacted, will require some shifting of priorities within the agency. It is possible that no shifts will be made if the agencies' new responsibilities are unwanted.<sup>6</sup> Finally, locating enforcement responsibilities in a state agency gives that agency control over the development of the content of the law.

After considering these factors, the advocates of Chapter 622 decided that a proposal to add to the responsibility of the Commonwealth's antidiscrimination agency would not be popular at that particular time.

#### INDIVIDUAL ENFORCEMENT

A personal bias toward individualism and the value of self-help activities led the proponents of Chapter 622 to opt for individual enforcement power, despite the possibility of alienating the state educational bureaucracy which would more usually assume primary enforcement roles in educational matters. However, while the primary control of enforcement would be individual and local, it seemed likely that the new law would serve to give rise to oversight obligations

<sup>1</sup> The Massachusetts Board of Education has used its withholding power in its efforts to enforce the state's racial imbalance law. *See School Committee of Springfield v. Bd. of Education, Mass. Adv. Sh. 1743 (1972)*, and *School Committee of Boston v. Bd. of Education, Mass. Adv. Sh. 161 (1973)* at 11-12.

<sup>2</sup> For example, the 1973 school budget for the City of Lexington called for a total outlay of \$11,919,667. Actual expenditures for the year amounted to \$11,353,981.06. State reimbursements came to \$2,511,847.52, or approximately 20% of the total. Thus 40% of the cost of its schools was being paid by the town's inhabitants through real estate taxes.

<sup>3</sup> These involved a Board mandate that kindergartens be operated in all communities and a legislated requirement that public schools make lunches available to their students.

<sup>4</sup> Limited waivers of both the kindergarten requirement and the school lunch requirement were given upon an adequate showing of hardship.

<sup>5</sup> An apparent example of this is the requirement, frequently alluded to by physical education teachers but unheeded otherwise, that "physical education shall be carried on daily for all pupils in the public schools." *Mass. Gen. Laws ch. 71, Section 3.*

<sup>6</sup> No agency of this type exists in Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Dakota, South Carolina or Virginia. Tennessee has a commission which has no enforcement powers and Florida, North Carolina and Texas have agencies with extremely limited jurisdictions.

<sup>7</sup> The Massachusetts legislature is currently considering a bill (H. 3305) to give the Massachusetts Commission Against Discrimination broader jurisdiction over complaints of discrimination in the public schools which will be concurrent with the jurisdiction of the courts to hear Chapter 622 complaints. The MCAD is itself actively seeking this responsibility, and personnel changes in the agency, since 1970 (not the least of which is the appointment of author Herz as a Commissioner) make it probable that these additional powers, if given, would be energetically exercised.

on the part of the state education agencies.\* Thus an election to bypass the internal state enforcement process did not cut us off from the state resource altogether and, in fact, appeared to leave the possibility open that two modes of enforcing the Chapter might evolve.\*\*

The striking variety of developments since the enactment of Chapter 622 has convinced us that the individual enforcement mechanism chosen gave rise to one of the great strengths of the law. The absence of any governmental control over the content of the legislation created a rather uncertain, speculative climate. Therefore, the interpretation of the law was open-ended, providing greater possibilities for applying it creatively.

Chapter 622 came into being at a time when interest in and concern about sex-role stereotyping and the public schools was just beginning to be expressed,\* and of course we cannot document our assertion that the law has been the primary cause of the changes which have occurred in the Commonwealth since 1971. But it stands to reason that it has been a decisive factor, simply because it gives children and their parents the leverage to deal directly with their schools in a way which is likely to obtain immediate results. We have experienced this ourselves in certain instances where we have helped with the resolution of a Chapter 622 claim. For the most part these have been straightforward factual situations, usually involving access to a practical arts course which the school administration has traditionally limited to students of one sex. Telephone calls or letters to the school principal, the superintendent of schools and the town council invariably produce a policy change in these cases.

#### BROAD CONSEQUENCES

The law has had many more consequences which support the case for an individually-enforced, broadly phrased right-of-access format. Students' efforts to use the law to enroll in sex-restricted courses have always turned out to be successful. These cases are usually resolved at an early stage, without the need for significant expenditures of time or effort." For the most part these cases

\* See the paragraphs of Mass. Gen. Laws ch. 15, Section 1G quoted in note 15 *supra*.

\*\* This is the position toward which post-enactment responses to Chapter 622 appear to be moving, as suggested *infra*.

\* The first broadly circulated report on sexism and public school policies and practices appears to have been *Dick and Jane as Victims*, a study of children's readers done by women in Princeton, New Jersey (who later organized themselves as Women on Words and Images), first published in 1972. Studies of school systems were done that same year in Ann Arbor ("An Action Proposal to Eliminate Sex Discrimination in the Ann Arbor Public Schools," March 1972), and New York City ("Report on Sex Bias in the Public Schools"). Following these, a number of women's groups, teacher groups, and individuals came out with collections of materials, studies and action plans for eliminating sex-role stereotyping in the schools. A good listing of these is found in *Sexism in Education* (3d ed., Sept. 25, 1972), Emma Willard Task Force on Education, University Station Box No. 14229, Minneapolis, Minnesota 55414. [See also "Kalamazoo: A Model for Change" by Carol Ahlbum in this issue.]

\* There have been exceptions in which considerable pressure has been required in order to move recalcitrant school officials as well as occasions in which the victory won has been somewhat hollow. An example of the latter occurred with the Natick, Massachusetts school system, when the principal of a junior high school, following a girl's complaint about nonaccess to a shop course, agreed to admit her and to inform all the girls in her class about the existence of these Chapter 622 mandated opportunities. He did so by means of the following bulletin, quoted here in full:

WILSON JUNIOR HIGH SCHOOL—NATICK, MASSACHUSETTS 01760

January 31, 1973

DEAR PARENTS: Your daughter has requested to take Woodworking and Art Metal this second semester instead of Home Economics. Although there is already a class of boys taking the industrial arts course, we will attempt to put in a few girls.

We want you to realize that your daughter will be given the same course as the boys. It will involve learning the various skills in working with wood and with metal. Some power machines will also be used.

We have not had seventh grade girls in this class before and we want your full understanding of what is expected. If you honestly feel that your daughter will benefit more from this class in Woodworking and Art Metal than in Home Economics, please check number "1" below. If you want your daughter to stay in Home Economics, check number "2".

Yours truly,

Harve B. Lemaire,  
Principal.

Check One—Please return on Thursday, February 1, 1973.

1. I understand that my daughter will have to follow the same course as the boys. I agree that she should take Woodworking and Art Metal.
2. I have decided that my daughter should stay in Home Economics.

(Signature of Parent)

have focused on junior high level home economics and shop courses which historically have been segregated by sex in Massachusetts.

A subject of almost equal interest has been access to equal opportunities in athletics. A girl who attends a school in which there is no competitive program for girls in her particular sport, and in which there is an existing boys' program, is able to use Chapter 622 to gain the opportunity to try out for the boys' team. Another community use of the law has been in conjunction with the sexual integration of Boston Latin School and Girls' Latin School.<sup>22</sup>

Chapter 622 has also been used as a springboard to system surveys. In town after town in Massachusetts, teachers, parents, students and administrators have joined forces to study their school system in order to determine what kinds of sex-role stereotyping activities are taking place. Frequently system studies are seen as the first phase of long-range corrective programs. A good example is the committee which the Lexington School Committee voted into existence and charged as follows:

[T]o report to the School Committee no later than . . . on what differences exist between the educational services and opportunities offered to boys and those offered to girls attending the Lexington public schools. One or more representatives of the following groups shall be invited to serve on the Committee: secondary school administrative staff, elementary school administrative staff, secondary school teaching staff, instructional materials specialists, physical education specialists, Lexington School Committee; Lexington N.O.W.; W.E.A.L. (Women's Equity Action League); Lexington League of Women Voters; CCLPS, parent teacher groups. The committee shall include in its report information on vocational courses for which state reimbursement is received, the program to be offered at the Minuteman Regional School; courses on practical skills; counseling and guidance services; the physical education program; the athletics program; instructional materials; and any other areas in which differences are found to exist.<sup>23</sup>

The general interest in these committees, but particularly the willingness of school administrators to participate, is traceable in large part to the existence of

<sup>22</sup> Until September 1972, only boys were permitted to attend Boston Latin School, the city school system's elite school for the academically talented girls with similar abilities were educated at Girls' Latin School. The Boston Latin building, in accommodation, 1000 students while the Girls' Latin facility is sufficient for only 1500 students and thus each year a fewer number of girls were given this educational opportunity. Since girls did as well or better on the entrance exam for the Latin Schools, the smaller number of female admissions to the program was obtained by requiring girls to achieve a higher exam score than boys. For the precise facts of the Latin Schools, and a ruling as to the constitutionality of these admissions practices see *Bray v. Lee*, 237 F. Supp. 934, 937 (D. Mass., 1972) in which the Court held that "the use of separate and different standards to evaluate the examination results to determine the admissibility of boys and girls to the Boston Latin schools constitutes a violation of the Equal Protection Clause of the Fourteenth Amendment, the plain effect of which is to prohibit prejudicial disparities before the law . . . I further find that on the basis of the record of this case female students seeking admission to Boston Latin School have been illegally discriminated against solely because of their sex and that discrimination has denied them their constitutional right to an education equal to that offered to male students at the Latin School."

The *Bray* decision doesn't reach the question of whether Boston could maintain the Latin Schools as single-sex schools. If the admissions policies were the same for both sexes, Chapter 622, which became effective while *Bray* was pending, would prohibit this solution because of the inequities between the physical facilities and the programs offered at the two schools. Recognizing this, the supporters of an all-male Boston Latin mounted a vigorous campaign to exempt the Latin Schools from the operation of Chapter 622. In the 1972 legislature a number of bills intended to accomplish this were introduced. The first typical was the one sponsored by the Boston Student Advisory Council which proposed to add a "grandfather clause" providing that "any school which on January first, nineteen hundred and seventy one, was operated as a school segregated on the basis of sex may continue to operate on such basis." The battle over these bills was a long and hard one. The Headmaster of Boston Latin circulated an appeal to the parents of his students to communicate their support for the exemption to the Chairman of the Joint Education Committee, telling them "We're at Armageddon. The future of the Boston Latin School is in your hands." Although the Education Committee stood firm, and reported the exemption bill, H. 2699, out unfavorably, the House overturned the adverse report by a vote of 141 to 75. Fortunately, the Senate failed to concur. Even then the debate was not over. Since the avenue of home rule legislation (affecting only Boston) was still open if Boston's City Council and Mayor would approve. Following a stormy City Council hearing, a bill was approved which would permit the Latin Schools to continue separately upon a showing of equality in admissions standards and in the equality of the educational programs and proof of educational sound reasons for the segregation. This effort was not approved by Mayor Kevin White, an action which was tantamount to a veto. As a result girls crossed the threshold at Boston Latin School in September 1972.

<sup>23</sup> Minutes, Lexington School Committee, March 14, 1974, on file at the School Administration Building, Lexington, Massachusetts.

Chapter 622. A local system is concerned with satisfying its own community with respect to the elimination of discriminatory practices, and it makes obvious sense to involve the community in the initial process of responding to the legislative mandate. This consequence strikes us as being one of the most positive products of the legislation.

A similar interest in outside viewpoints has been shown in other responses of educators to Chapter 622. They want to know what the supporters of the legislation were seeking to achieve. This is a normal and sensible reaction on their part, and one which provides a realistic opportunity for developing a cooperative relationship between the administrators of the educational system and the group seeking to change the schools. Each side has something to offer. In the case of Chapter 622, an ongoing process has resulted, with the administrators and the advocates working together toward agreement upon the scope of the law and the responses which should be made to it.

#### STATE RESPONSE AND INVOLVEMENT

Much of the impact which Chapter 622 has had upon Massachusetts schools and educators is directly due to the efforts of volunteers who worked to see that the law was implemented. These people gave advice and guidance to individuals who wanted to avail themselves of the protections of the law. They served as catalysts in the process of creating new groups of advocates and talked about Chapter 622 to anyone who would listen. They aroused local school committees, ITA's, teacher groups and Leagues of Women Voters. And they maintained continuous pressure upon the state agencies which could act in ways which would expand the potential of Chapter 622.

The most desirable way the state could respond appeared to be an active acceptance of the responsibility for oversight of the law.<sup>32</sup> This would require the state to assume the role of a compliance officer, defining the type of behavior which would conform with the law, assisting local school systems in their efforts to comply and imposing sanctions when voluntary compliance could not be obtained. Progress has been made toward this goal. New groups of people have been involved in the implementation of Chapter 622, adding further dimensions and perspectives to the law which might not have been achieved otherwise.

#### STATE GUIDELINES

In Massachusetts, a concerted and persistent effort<sup>33</sup> to make the state acknowledge its duty to provide guidance on Chapter 622 to the local school systems finally produced an Ad Hoc Committee whose members, appointed by the Commissioner of Education, were asked to "develop policy guidelines for the implementation and enforcement of this legislation."<sup>34</sup>

The committee was composed of proponents of the law, representatives of groups affected by the law, students, teachers and local and state administrators. The guidelines which were developed by this committee took the natural step of moving beyond the guarantee of access in Chapter 622 to considering the kinds of intentional and unintentional barriers to access which can exist in an educational setting. The proposed guidelines described the ways of removing these barriers. In addition they called for internal monitoring procedures in an effort to ensure that deviations from desired norms would not pass unnoticed. The topics covered by the committee guidelines<sup>35</sup> included admissions policies, entry into courses, guidance practices, course content and materials used, and extra-curricular and athletic activities.

In March 1974, the Commonwealth's Board of Education agreed to accept and promulgate the guidelines drafted by the Ad Hoc Committee, but with one ma-

<sup>32</sup> See note 15 *supra*.

<sup>33</sup> Although a few individuals had doggedly persevered on this course since Chapter 622's passage, needed impetus was provided by a statewide conference on Chapter 622 held March 24, 1973. The idea for this conference came from Mayor Kevin White's Office of Human Rights. Major credit for making its reality must be given to Geraldine Pichaw, a member of the Office for Human Rights staff and ultimately the Chairwoman of the Ad Hoc Committee described *infra* at note 32. A central recommendation of the conference followed up on by its organizers, was that guidelines for Chapter 622 should be issued by the state.

<sup>34</sup> Letter to invited participants from Gregory E. Anrig, Commissioner of Education, dated June 22, 1973.

<sup>35</sup> "Recommendations Pertaining to Access to Equal Educational Opportunity" March 11, 1974, prepared by the Ad Hoc Committee for Chapter 622 and considered by the Massachusetts Board of Education at its March 26, 1974 meeting.

for change. The committee guidelines were designed to serve the functions of advising local school systems of the law and the terms of appropriate compliance with it, and of giving notice to the local agencies that the Board of Education was requiring and would enforce compliance with the legislative mandate contained in Chapter 622. The Board chose to accept the guidelines only for their *advisory* use, and voted to delay for another year consideration of enforcement mechanisms to operate within the Department of Education.

As might be expected, the original proponent groups raised strong objections to the nonmandatory character of the Board's guidelines (which the Board chose to call Recommendations). More surprisingly, new voices joined in, most notably those of some directors of public school athletic programs. These people saw the strong committee guidelines as a tool to convince conservative school committees that increased athletic expenditures were necessary. The original form of the guideline on athletics set as a goal the equalization of expenditures "for male and female students, proportionate to their membership in the student body" in each category of athletic activity.<sup>24</sup> Because it is unlikely that a town is going to reduce the budget for boys activities, assuming a constant level of participation, the probable consequence of an equalization requirement will be a larger athletic budget, with the new money going to girls' sports.

Another objector to the nonmandatory Recommendations was the Massachusetts Commission Against Discrimination, which identified certain areas in which the Recommendations appeared to conflict with existing antidiscrimination laws administered by the agency. Teachers, administrators and guidance counselors within individual school systems also expressed reservations about the diminished impact which recommendations would have and noted the possibility of confusion. Some members of the Ad Hoc Committee filed a formal objection to the Board's action. Despite all this activity, as of this writing, the guidelines remain Recommendations and continue to be phrased in nonmandatory terms.

This disappointment is somewhat offset by the fringe benefits of the controversy: the event has served to swell the ranks of proponents of Chapter 622 and has encouraged the spread of information regarding the implications of the law and its accompanying individual right to sue. Significant public attention has focused on the Board of Education's commitment to review in a year the operation of the Recommendations and consider then whether to convert them into regulations.

Internal advances are also being made in the Department of Education as a result of Chapter 622 and the momentum generated by the work of the Ad Hoc Committee. The goal is a system for providing advice and assistance to local school systems concerned with providing equal educational opportunities for boys and girls. Funds for two staff positions have been included in the Department of Education budget for fiscal 1975. One person already at work is surveying system-wide practices and designing methods for initiating change. However, it still will be necessary to arouse a school system's interest in taking advantage of the help being offered by the state, and thus it still will be necessary for students and parents to remain actively interested in whether and how the law is being implemented.

Within the two years following its enactment then, Chapter 622 has been put to good use by public school students and parents. Appropriate institutional responses are occurring as well. Commitment to furthering the policies which underlie the law has been engendered to a degree that makes us confident that Chapter 622 will continue to make a difference in the operation of the public schools of the Commonwealth of Massachusetts. There is one further question to answer: what results has Chapter 622 achieved in vocational education in Massachusetts?

#### VOCATIONAL EDUCATION

The ultimate goal of the drafters of Chapter 622—to expand occupational opportunities for women by expanding training opportunities for girls—still remains more of a hope than a reality. There are indications that vocational education practices are becoming less rigid, but not all vocational educators have recognized and publicized the new options which the law makes available to students interested in being educated for employment.<sup>25</sup> One new regional vo-

<sup>24</sup> *Id.* Paragraph 6c.

<sup>25</sup> Much of the recruitment material used by existing schools has not been revised, and in some instances the course listings continue to be labeled "for boys," "for girls," or "for boys and girls."

cational-technical school, scheduled to open in fall 1974, is making active efforts to attract girls. Its facilities are planned with the expectation that at least forty percent of its enrollment will be female, a figure which is comparable to the percentage of females in the area work force.\*

Making vocational programs available to girls, however, is only the beginning. It is here that the affirmative efforts called for by the Ad Hoc Committee are truly needed. Girls who are interested in preparing themselves for jobs need to know that new fields are now open to them and that these opportunities are challenging, satisfying, remunerative and well within their capabilities. Beyond the tasks of specific guidance as to occupational choice is a great need that general information be provided to adolescent girls concerning the economic facts of life and what a female's realistic expectations about financial support ought to be.

#### BROADENING EDUCATION OPTIONS

The passage of Chapter 622 has turned our attention<sup>7</sup> to the possibility of varying the scheduling of vocational education for females, since it currently appears to be out of phase with the actual needs of women in varying economic and family situations. We are thinking that publicly-supported occupational training for women when they need it—that is, when they are ready to permanently enter the labor force—is an option which needs greater consideration and exploration. The fact that we are now aware of the potential for changing the vocational education structure in order to better serve the needs of girls and women (and we are bringing this to the attention of others) illustrates another way in which Chapter 622 is having a continuous and ever-widening impact upon education in the state.

The consequences which Chapter 622 has had for vocational education in Massachusetts confirm our conclusion that legislation of this type ought to be viewed, and valued, as a first step in a long and expanding process. Undoubtedly an access law is an essential beginning point. Those who wish to propose an access law should recognize that its major function will be to stimulate a great number and variety of spinoff activities. These efforts in turn will lead to a closer scrutiny of the educational structure itself to see whether it is equally well suited to the needs of both sexes. A formulation which permits individual enforcement seems to us most likely to produce these results. If an individual enforcement law can be used to generate a statewide agency response, the development of basic policies will proceed more quickly<sup>8</sup> and the law will be likely to have more impact sooner. Even without the expanded implications, however, legislation such as Chapter 622 contains in itself the potential to produce real change in the schools, and to do so on behalf of those with unfulfilled and growing needs.

Mr. PARROTT. This was a 3-day workshop run at the Massachusetts Institute of Technology from May 21 to May 23, 1973.

High school is the last formal education for most women. Regardless of whether they go directly to work after high school or pursue further education, they are likely to choose women's jobs.

Relatively few girls carefully consider their future careers and the full range of options. Unless they do so before the end of high school, women will continue to settle for lower status and achievement than men, and the situation will be worse for women from poor families who have little formal education.

I think that by now there is considerable consensus on developing greater opportunity for women. Everyone of us has been touched by some manifestation of the need—wives' or daughters' conflicts, the media, the political activity associated with the women's movement, the large number of women already in the work force, and personal experience as women.

What reservations persist often arise from genuine uncertainty about how to evolve strategy and tactics that will not adversely affect others—the rearing of children and family relationships, for example, or members of the current work force who must include new entrants.

\* Greater Lowell Regional Vocational-Technical High School, located in Lowell, Massachusetts.

<sup>7</sup> We have received a grant from the National Institute of Education to produce a case history of Chapter 622 as an effort to redirect vocational education in Massachusetts through the use of the legislative process.

There is no such thing as a solution to such fundamental questions; rather they call for a continuous process of accommodation among individuals, institutions, and societal values. \* \* \*

[Complete document retained in subcommittee files.]

Mr. PARROTT. I believe that I have used more than my share of time, but I did want to comment on some of the things that were discussed by the prior panel, primarily raised through questions.

First of all, with regard to better State plans, one of the first things that I found out as executive director was that traditionally State advisory councils participate in the development of the State plan as it relates to occupational education, and then during that year base their evaluation activities on what that State plan for the prior year said.

Now, in most States, and in particular, Massachusetts, that makes no sense because the State plan, I believe, is not an operational plan for occupational education. Therefore, to devote a lot of attention to evaluating essentially how Federal money is spent as it relates to the State plan is itself a compliance activity.

One of the first things that I did in Massachusetts was to see that Federal funds only represent 8 percent of the total amounts of money in the Commonwealth that are spent on occupational education.

We get roughly \$12 million under Public Law 90-576 through a reimbursement formula in the State through appropriations, and about another \$100 million is spent, so we decided that to do service to the State, as well as to operate under the mandate that we have from Congress, looking at congressional intent, we had to look at the total thrust of the State program.

I think that on the question of funding and legislation, that it does create special problems for the States. I know that I would argue with our own commission of education on what legislation is meant to do.

Very often what happens with legislation such as under title IX, although I heartily endorse that and other legislation designed to enforce or open up options, is that this is very often translated by the State into adding people to the education department staff, rather than a look at other priorities that might be shifting.

Two, it tends to set up a special office, such as the Office of Women or the Office of Special Needs. Now, I don't object to that, but what happens is that, rather than a pervasive effort across all administrative arms of State departments and local school committees, what happens is that, if I have a problem with sex bias—OK. Now we have a special office and I feed my problems into them, and there is very little cohesive effort to educate the rest of the administrative arm of the board, and I think that there has to be some balance between a special office with special enforcement and some thrust to making sure that these efforts are a part of every bureau, every division, whether you are talking about the Office of Education or State departments of education.

I think there is also a question of interest and sensitivity on the issue of sex bias. I can recall—I graduated from a small town high

school in New Hampshire in 1947. I know that when I was a sophomore—this is one of the few things I remember about my high school education—I wanted to get into home economics, as it was called then. I liked to cook. I liked to do my own sewing.

My wife and I have four children, one in college, two daughters who are roughly the ages of the students here, and a younger son who is just entering high school.

I was ridiculed. I think, for about a month for wanting to get into home economics program. Not laughed out of school, but I was made to feel quite embarrassed that there was something wrong with a person who was not satisfied with going into the metal shop or the wood shop. I have no talent with my hands except for cooking. Since then, I have done a little studying on the side and do a lot of cooking.

I want to also address the question of statistics because I noticed. I think, a couple of weeks ago or last week—I am not sure it was, before this subcommittee, but in questions to Bill Pierce there was some concern by committee members about the amount of statistics and what those statistics meant.

I think that the prior panel stressed the need to collect data by sex and by minority groups. I, too, think that that is very important because it is very difficult to measure progress or to identify problems, and, while State advisory councils were not by law designed to do research, we have in effect had to spend some of our funds to do this.

We have had to work with other groups in the State that could have or could do either sampling surveys on statistics, and I think that that has to be built back in in order to monitor what is going on.

One of the difficulties that I found—and it is a trap we all fell into, that the statistics that come out nationally or used to come out nationally through the Office of Education are really comparing apples to potatoes or apples to peaches.

One must know the basis on which the State reports its enrollments in general. One has to be able to translate those enrollment figures into something that tells about the magnitude of effort and the level of activities.

What I mean here, in taking two obvious ones, is that the number of student contact hours that a woman would get in consumer or homemaking or in health occupations measured against student contact hours that a male would get in auto mechanics are quite different.

If you have one person in consumer homemaking, one enrollment, and one in auto mechanics, it looks the same, but, if you spin off and try to find out the number of real hours that are devoted to skill training or occupational or vocational training, you come out with quite a different picture, and there is great skewing. There is a very small number of students, primarily male, in Massachusetts putting forth pretty solid years of high level, high quality training. By looking at sheer statistics, you don't get any measure of the true impact.

Here what I mean by true impact is that women are not getting access to the same quality programs that males are in the Commonwealth.

This whole concern that the State has with sex discrimination relates to a larger issue of access. We have the same concerns about access of minority groups to quality programs. Most of the newer regional vocational schools are in suburbs of less than 2 percent minorities' enrollments. Most are in areas which, while qualified as depressed areas, in fact don't because they are in some very affluent communities, and we have this access problem with the facilities in Massachusetts in urban areas, Boston, Springfield, which do not measure up in any way to the suburban opportunities through the regional vocational schools.

I would like to go back to the question about where the effort has to be put in. I think there is a need for joint effort, that the Department of Labor must work with labor and business and industry group to change attitudes, change hiring practices because—and this is a thing I feel very strongly about—vocational education is in danger of using the wrong criteria to determine its success, and it is these criteria which prevent a strong affirmative action program in most States.

Superintendent-directors in general will say that, if a normal high school principal says: "I am successful because 44 to 50 percent of my students go on to college," "Then I have every right to say that I am successful because 85 or 90 percent of my graduates either go into employment or", the real nice phrase, "into directly related jobs."

Well, the education which I have and the job that I hold now are so far apart that I don't really think that is important.

What happens is that the superintendent-directors know that there are problems in placing auto mechanics that are women, and, as much as construction fields have opened up for women, that one has to work harder to change industry attitudes and to change parent attitudes, or they tend to dismiss as something not very important right now.

I think legislation goes a long way, both in our State and nationally, to correct this, but unless the local school districts; the State boards, are forced into programing for these activities, not much will happen, and 20 years hence we will have the same statistics. We will be talking about minorities and women.

I think I will stop now and I would just like to correct one thing. Ms. Rideout and Ms. Fabian did not accompany me down here. I accompanied them.

Mrs. CRISHOLM. Thank you very much, Mr. Parrott. Ms. Rideout? Or Ms. Fabian. It doesn't make any difference.

Ms. FABIAN. My name is Rosemarie Fabian. I am a member of the student advisory council, Massachusetts State Board of Education. I am also a junior at Chelmsford high school. Chelmsford is a small Massachusetts town of about 30,000 people, many of whom are parents.

They are concerned with the kind of education their children get, but they are also unwilling to forego the traditional means by which that education is administered. That is evidenced by the fact that we don't have very many women administrators in Chelmsford, which sets an example for all students. They don't see women in

administrative positions. They only see them as teachers or as lunch-room attendants, which isn't very helpful at all.

Mr. Parrott mentioned chapter 622. I would like to read it. It is a very short law.

No child may be excluded from any school nor prohibited nor discouraged from participating in any course activity or resources available in any such school on account of race, sex, color, national origin, or religion.

Recommendations have been adopted for this law, but since recommendations are only recommendations, they have no force of law. The State board is now trying to promulgate regulations for this law which would help to clarify it. Obviously it is a very general law, but, hopefully, using something like this, we can try to correct some of the things that are going on in places like Chelmsford. Thank you.

Mrs. CHISHOLM. Thank you; Ms. Rideout?

MS. RIDEOUT. My name is Vicky Rideout, and I am a senior at Silver Lake Regional Vocational High School in Kingston, Mass.

Mostly, I just want to answer your questions, but I thought there were a few things that I should mention very briefly. First of all, I understood that there might be some interest in student involvement in education as a whole in Massachusetts on the part of your committee.

As a moderator at the statewide student government organization, involving over 400 students, and a full voting member on the State Board of Education. I think I am qualified and I know that I am more than eager to answer any questions that you may have concerning student involvement in education and in the political process as it affects education in Massachusetts.

Very generally, though, I would like to mention a few of the areas that I am prepared to speak on for you. Silver Lake is a regional high school, but it also a vocational high school located in the suburbs of Boston.

I am not and never have been enrolled specifically in a vocational aspect of the school system, although, since you have to go through a formal process of applying and getting accepted to a vocational school, I have taken courses in vocational school.

Since last year, all courses in our school, vocational or not, have been formally open to members of both sexes. However, I am still aware of sexual discrimination in my school in three very important areas.

The first I think is the most important, and that is attitudinally. I find a very great discouragement on the part of teachers, administrators, and fellow male students to females who are trying to do anything out of the ordinary in our school system.

The second point is in terms of the budget the female students get, versus male students, in athletics, and there is quite a lot of discrimination and that is felt very strongly by all the students.

Finally, in terms of the employment in administration, which Rosemarie mentioned, and the teachers' salaries—I know female athletic coaches, for example, are paid considerably less than the male coaches.

I hope that I can also offer some insight into discrimination at the junior and elementary school levels from my more recent memories than yours.

At the time of junior high school, courses were not opened to either sex, and I was denied the right to take certain courses and I was forced into some courses that I did not want to take, simply because I was female.

Finally, I could possibly be the bearer of good news. Since, as I stated earlier, courses are offered to both sexes at my school, I have seen the enthusiasm with which students greet such opportunities, and I hope that that might be encouraging to those of you who are attempting to get open courses mandated on a wider scale.

I have brought with me a copy of the *Kaleidoscope* magazine, which comes out each season in Massachusetts from the Department of Education. The latest issue for the winter of 1975 was entitled "Special Issue: What To Do About 622," which is the law that Rosemarie was just telling you about.

What it does is to describe different courses that are offered in schools throughout the Commonwealth that are integrated for the sexes that used to be segregated. For example, in my school, there is a course entitled "Survival for Singles," which is home economics. It shows pictures of young males taking that course.

There is also an article about carpentry courses in which we have a number of females working—actually working on houses, building houses, working with machinery in the shops, and things like that.

I think that sometimes you wonder about all this and whether anybody wants to take home economics or wants to take shop, and I think it is good news to know that there is.

Basically, that is all I wanted to do, to just acquaint you with my experience. I am certainly eager to answer any questions that you might have.

Mrs. CRUSHOLM. Thank you.

Mr. PARROTT. Madam Chairperson, there was one other thing that I was requested to provide that I forgot to introduce. Both students have referred to regulations which are under consideration at the State level. I have a copy of the draft regulations which I would like to submit as a part of the record. I think there are perhaps about 20 pages of rather specific regulations.

Mrs. CRUSHOLM. It shall be inserted in the record.

[The draft regulations referred to follow:]

THE COMMONWEALTH OF MASSACHUSETTS—DEPARTMENT OF EDUCATION, BOSTON, MASS.

PROPOSED REGULATIONS PERTAINING TO ACCESS TO EQUAL EDUCATIONAL OPPORTUNITY

1.00 Purpose and Construction of These Regulations.

1.01. These Regulations are promulgated to insure the right of access to the public schools of the Commonwealth and the equal enjoyment of the opportunities, advantages, privileges and courses of study at such schools without regard to race, color, sex, religion or national origin. These Regulations shall be liberally construed for these purposes.

1.02 The obligation to comply with the Regulations is not obviated or alleviated by any local law or rule or regulation of any organization, club, athletic or other league or association which would limit the eligibility or participation of any student on the basis of race, color, sex, religion or national origin.

2.00 *Private Right of Enforcement.*

2.01 Nothing in these Regulations shall abridge or in any way limit the right of a parent, guardian, or person affected to seek enforcement of Chapter 622 of the Acts of 1971 in any court or administrative agency of competent jurisdiction.

3.00 *School Admissions.*

3.01 All public schools in the Commonwealth shall admit students without regard to sex, race, national origin, color or religion. This includes, but is not limited to regional vocational-technical schools, elementary, secondary, trade, and selective academic high schools.

3.02 No school shall discourage in any express or implied manner, applicants for admission because of race, sex, national origin, color or religion. Written materials used by a school to recruit students shall not contain references suggesting the predominant sex of the students presently enrolled or the anticipated sex of the students to be recruited. Pictorial representation, in the aggregate, in such material shall depict students of both sexes and of minority groups. References to only one sex in the name of schools, programs or activities shall not be retained.

3.03 Each public school shall inform the community which it serves that race, color, sex, national origin or religion are not considered as criteria for admission to that school, particularly where past practice, custom or other cause might reasonably be expected to reduce attendance from any such class of students.

3.04 Citizenship of any applicant shall not be considered as criteria in admission to any public school nor is citizenship to be considered a factor in the assignment or availability of courses of study or extra-curricular activities.

3.05 Testing, the use of recommendations or other standards utilized as a part of the admissions process to any public school, including but not limited to selective academic high schools, regional vocational-technical schools and trade schools, must not discriminate on the basis of race, color, sex, religion or national origin. Limited English speaking ability (as defined by Chapter 71A of the General Laws) shall not be used as a deterrent to or limitation on admissions.

3.06 If admission to any school, including but not limited to selective academic high schools, regional vocational-technical schools and trade schools, is dependent upon the participation in or completion of courses or programs which were previously limited to students of one sex or if close scrutiny reveals that access mechanisms or other administrative arrangements have limited the opportunities of any racial ethnic or religious group of students to participate in such programs, then such criteria must be abolished.

3.07 Nothing in these Regulations shall be construed so as to control the interpretation of or interfere with the implementation of Chapter 641 of the Acts of 1965, as amended by Chapter 636 of the Acts of 1974, providing for the elimination of racial imbalance in public schools, all rules and regulations promulgated in respect thereto and all court and administrative decisions constraining or relating thereto.

4.00 *Admission to Courses of Study.*

4.01 Each and every course of study offered by a public school shall be open and available to students regardless of race, sex, national origin, color or religion. Nothing herein shall be construed to prevent particular segments of a program of instruction from being offered separately to each sex when necessary in order to respect personal privacy.

4.02 The determination of what courses or units of study are to be required of any student shall also be made without regard to the race, color, sex, national origin or religion of that student.

4.03 Each public school shall inform the community which it serves and its student body that race, color, sex, religion or national origin are not considered as criteria for admission to any course of study in that school.

4.04 Each student, regardless of race, color, sex, national origin, religion, or limited English speaking ability, shall have equal rights of access to courses of study and other opportunities available through the school system of the city or town in which he or she resides, along with appropriate remedial and/or bilingual instruction and programs and other supportive services.

1.02 The obligation to comply with the Regulations is not obviated or alleviated by any local law or rule or regulation of any organization, club, athletic or other league or association which would limit the eligibility or participation of any student on the basis of race, color, sex, religion or national origin.

2.09 *Private Right of Enforcement.*

2.01 Nothing in these Regulations shall abridge or in any way limit the right of a parent, guardian, or person affected to seek enforcement of Chapter 622 of the Acts of 1971 in any court or administrative agency of competent jurisdiction.

3.09 *School Admissions.*

3.01 All public schools in the Commonwealth shall admit students without regard to sex, race, national origin, color or religion. This includes, but is not limited to regional vocational-technical schools, elementary, secondary, trade, and selective academic high schools.

3.02 No school shall discourage in any express or implied manner, applicants for admission because of race, sex, national origin, color or religion. Written materials used by a school to recruit students shall not contain references suggesting the predominant sex of the students presently enrolled or the anticipated sex of the students to be recruited. Pictorial representation in the aggregate, in such material shall depict students of both sexes and of minority groups. References to only one sex in the name of schools, programs or activities shall not be retained.

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4.02 The determination of what courses or units of study are to be required of any student shall also be made without regard to the race, color, sex, national origin or religion of that student.

4.03 Each public school shall inform the community which it serves and its student body that race, color, sex, religion or national origin are not considered as criteria for admission to any course of study in that school.

4.04 Each student, regardless of race, color, sex, national origin, religion, or limited English-speaking ability, shall have equal rights of access to courses of study and other opportunities available through the school system of the city or town in which he or she resides, along with appropriate remedial and/or bilingual instruction and programs and other supportive services.

4.05 If participation in a class, course, or program is dependent upon the participation in or completion of courses or programs which were previously limited to students of one sex, or if close scrutiny reveals that access mechanisms or other administrative arrangements have limited the opportunities of any class of students to participate in such programs, then all members of the previously excluded group shall be given the opportunity to acquire the prerequisites or be allowed to enter the program without such prerequisites. If it cannot be shown that the prerequisite course program is essential for success in a given program, the prerequisite shall be abolished.

#### 5.00 Guidance.

5.01 Guidance Counsellors and other personnel shall represent to the students a broad spectrum of education and career opportunities. Race, color, sex, national origin and religion shall not be considered as limiting factors in career determination.

5.02 Career Day programs and other occupational information shall include representatives of both sexes and of minority group members in a broad variety of occupational roles. Schools shall not permit materials including pictorial representations, to be used to recruit students for employment, including training, that contain a preference for individuals of a particular race, color, sex, national origin or religion. Any pictorial representation in such materials, in the aggregate, shall depict members of both sexes and of minority groups.

5.03 No materials or tests shall be employed for guidance purposes which provide different norms and/or scoring systems for males or females and/or limit choices on the basis of race, color, sex, national origin or religion.

#### 6.00 Curricula.

6.01 The curricula of all public school systems shall present in fair perspective the culture, history, activities, and contributions of persons and groups of different races, nationalities, sexes, religions and colors.

6.02 School books and other educational material used in the public school systems shall, taken as a whole, include characterizations and situations which depict individuals of both sexes and different races, colors, religions and nationalities in a broad variety of positive roles.

6.03 Each school shall provide equal opportunity for physical education for all students. Goals, objectives and skill development standards in such classes shall not be designated on the basis of race, color, sex, religion or national origin.

#### 7.00 Extra-Curricular Activities.

7.01 Advantages and privileges of public schools include all extra-curricular activities made available, officially sanctioned, sponsored or supervised by any public school. No school shall permit outside organizations to conduct extra-curricular activities for students under the sponsorship of the school which restrict student participation on the basis of race, color, sex, religion or national origin.

7.02 No student shall be denied the opportunity in any implied or explicit manner to participate in an extra-curricular activity because of the race, color, sex, religion or national origin of the student except as provided in section 7.06.

7.03 Each school system shall provide a fair distribution of athletic expenditures. Each school within such system shall provide equal opportunity for male and female students to participate in intramural and interscholastic sports. Factors considered in determining equal opportunity shall include budgetary allocations, the proportion of male and female students in the student body, the number and nature of activities offered, levels of competition, equipment (including rate of replacement), supplies, awards, uniforms, facilities, scheduling of games and practice times, travel opportunities and allowances, opportunities to receive equitable coaching and instruction at each level of competition and the availability of services such as medical and insurance coverage, publicity, clerical and administrative staff, scouting services and audio-visual aids.

7.04 In developing the athletic program, a school shall be required to demonstrate good faith by taking into account ascertained student interest.

7.05 In order to insure fair distribution of athletic expenditures as defined in section 7.03, each school shall indicate in its budget the anticipated expenditure for each interscholastic and intramural athletic activity and the anticipated student participation in that activity by number and sex.

7.06 A school may establish two teams for interscholastic competition in a particular sport and open one such team to male students only and one to female students only, provided that the requirements of section 7.07 are satisfied.

7.07 Teams comprised primarily or solely of persons of one sex shall be granted equal instruction, training, coaching, facilities, equipment and opportunities to practice and compete as teams engaged in a similar activity comprised primarily or solely of persons of the opposite sex.

7.08 Participation in extra-curricular activities shall be actively encouraged by each school for both boys and girls and for racial and ethnic minorities. When offering extra-curricular programs, schools shall take into consideration the ethnic traditions of the student body. Criteria not related to skill levels which act to exclude members of one sex or of any racial, religious, or ethnic group represented in the school from participation in specific athletic or other extra-curricular activities cannot be permitted.

#### 8.00 Facilities.

8.01 Every new school which is to be constructed and every addition to an existing school or program for modernization of an existing school shall be designed or planned so as to ensure that the educational opportunities to be offered within that school following its construction or expansion or reconstruction will be available equally to all students thereof without regard to the race, color, sex, religion or national origin of any such student.

8.02 The goal of each school shall be to provide equal numbers of males and females with those facilities and conveniences within a school which are separated for reasons of privacy, e.g. showers, locker rooms, changing rooms, toilets and lavatories. Any school to be constructed shall make such provision and any plan for the expansion or modernization of an existing school shall include whatever provision is necessary in order to achieve compliance with this section.

#### 9.00 Active Efforts.

9.01 The School Committee of each school shall annually examine all aspects of the total school program (K-12) to insure that all students regardless of color, national origin, race, religion, or sex are given an opportunity to develop skills, competence, and experience so that they may be able to participate in all programs offered by the school including athletics, intramurals, and extra-curricular activities.

9.02 Because selective secondary schools have had atypical student bodies in the past, such selective secondary schools, including but not limited to selective academic high schools, regional vocational-technical schools and trade schools, shall admit qualified applicants of each sex and racial and ethnic groups in numbers proportionate to the existence of members of such class in the secondary school population of the geographic area served by that school. After the period for application to the school has closed, if it is found that qualified applicants of one of the above classes have not applied in numbers sufficient to maintain this proportion, qualified students of the other categories may be selected to fill the remaining openings.

9.03 If participation in any school sponsored program or activity has previously been limited to students based on color, national origin, race, religion, or sex, then the School Committee shall make active efforts to insure that equal access to all school sponsored programs or activities be provided within the system.

9.04 The School Committee shall examine all scheduling procedures to insure that these do not impede equal access to all classes (required or elective) regardless of color, national origin, race, religion or sex.

9.05 All school systems must insure that all new purchases of textbooks and educational materials, including testing and evaluative devices, used in schools shall reflect the standards set out in section 6.02 of these Regulations.

9.06 The superintendent of each school system shall annually examine the total system of access to each school within the district and shall take any necessary affirmative action, and adopt any necessary changes to insure that all obstacles to equal access for all persons regardless of race, sex, color, national origin or religion no matter how subtle or unintended, are removed. Special care shall be taken when information or evidence indicates the absence or the markedly disproportionate enrollment in any school of students of either sex, or of any racial, national or religious group present within the community which the school serves.

9.07 At the beginning of the school year, the superintendent of each school system shall be responsible for sending to the parents of all school age children, in their primary language a notice of the existence of Chapter 622 and of its implications. Such notice shall include the information that all courses of study, extra-curricular activities, and services offered by the school are available with-

out regard to race, sex, national origin, color or religion. Upon request, the Department of Education shall provide a translation in requested languages to assist superintendents in complying with this section.

9.05 The superintendent shall inform the community of the existence of the law and of its implications through newspaper releases or radio or television announcements.

9.09 The superintendent of each school system shall make certain that employers who recruit new employees in and through the schools of that district, do not discriminate on account of race, color, sex, religion or national origin in their hiring and recruitment practices within the schools. Before any employer is allowed to recruit at or through any school, the employer shall be required to sign a statement that he, she does not discriminate in hiring or employment practices on account of race, color, sex, religion or national origin.

9.10 Any contributions to a school for activities and awards within or sponsored by the school or for scholarships administered by the school made after the effective date of these Regulations by any persons, group or organization shall be free from any restrictions based upon race, color, sex, religion or national origin unless the clear purpose of the restriction is to remedy a prior discrimination.

9.11 It shall be the responsibility of the School Committee and the Superintendent to provide necessary information and in-service training for all school personnel in order to:

advance means of achieving educational goals in a manner free from discrimination on account of race, color, sex, religion or national origin.

enhance consciousness of the kinds of discriminatory and prejudicial practices and behavior which may occur in the public schools.

9.12 The principal of each school shall annually examine the system of access to each course of study, advantage and privilege provided within the school and shall take any necessary affirmative action and adopt any necessary changes to insure that all obstacles to equal access for all students regardless of race, color, sex, religion or national origin no matter how subtle or unintended are removed. Special care shall be taken when information or evidence indicates the absence or the markedly disproportionate participation of students of either sex or of any racial, national or religious group present in the school, in any course of study, advantage or privilege offered by or through the school.

9.13 The principal of each school shall annually inform students in a manner certain to reach all students, of the existence of the law and its implications. The principal shall inform them that all courses of study, extra-curricular activities, and services and facilities offered by the school are available without regard to race, sex, color, national origin or religion.

9.14 Department heads and teachers shall annually examine the enrollment for each course under their jurisdiction. Whenever there appears an absence or markedly disproportionate participation in any class of a racial, national, sex, religious or other group, the department head or teacher shall report this to the principal and appropriate and immediate steps should be taken to reemphasize to the group of students eligible to take the course, that the course is open to all students regardless of race, sex, color, national origin or religion. The department head and teachers shall also carefully review the total system of access to the course and the course content to determine if either unnecessarily discourages participation by any group. Any obstacle to equal access or participation must be removed.

9.15 Department heads, principals and teachers shall regularly scrutinize all classroom procedures and practices to determine if any group of students is discriminatorily classified or identified by the teacher either by words or action. Duties or privileges shall be distributed among the students without regard for sex, race, color, national origin or religion. Derogatory epithets or references to members of either sex or of any racial, national or religious group shall not be used by school personnel.

9.16 School personnel engaged in directing, coaching or assisting in athletic or extra-curricular activities shall regularly examine the enrollment for each activity under their jurisdiction. Whenever there appears an absence of, or a markedly disproportionate participation in any activity by persons of either sex (except as limited by section 7.06) or of any racial, national or religious group found in the school, the school personnel attached to the activity shall report this to the principal and appropriate and immediate steps should be taken to re-emphasize to the group of students eligible to participate in the activity, that

the activity is open to students without regard to race, sex, national origin, religion or color. Qualifications for participation shall also be carefully reviewed to see if they unnecessarily act to exclude certain groups of students.

9.17 Guidance counsellors and other school personnel providing pupil personnel services within a school shall make certain that they are serving members of both sexes and of all races, nationalities and religions found in the school. Guidance counsellors or other persons providing pupil personnel services shall regularly make certain that the students are aware that their services are available to all students.

9.18 The opportunity to receive guidance and counselling in a student's primary language should be made available to students from homes where English is not the primary language spoken.

9.19 Since adults serve as rôle models for students, school authorities shall utilize adults in a variety of jobs, and as members of policy making committees, to the extent consistent with their contractual obligations, without regard to race, color, sex, religion or national origin.

9.20 Adults serving on athletic regulatory boards shall fairly represent the interest of both male and female students.

#### 10.00 *Complaint Procedure.*

10.01 A parent, guardian or other person or group, including but not limited to the Regional Advisory Committee, who believes that c. 76, s. 5 of the General Laws or these Regulations has been or is being violated, may request a written statement of the reasons therefor from the responsible School Committee and may submit a copy of such request to the Bureau of Equal Educational Opportunity of the Department of Education. If such request is made, a copy of such request shall be sent by the School Committee to the Bureau of Equal Educational Opportunity.

10.02 The School Committee shall respond promptly in writing to the complaining party. The School Committee shall also send a copy of its response to the Bureau of Equal Educational Opportunity.

10.03 The Bureau of Equal Educational Opportunity shall act as the representative of the Board of Education for the purpose of receiving complaints pursuant to these Regulations.

10.04 The Bureau of Equal Educational Opportunity shall, pursuant to a complaint received under section 10.01 or on its own initiative, conduct reviews to insure compliance with c. 76, s. 5 and these Regulations. The School Committee and the specific school(s) involved shall cooperate to the fullest extent with such review.

10.05, In the event of non-compliance with Chapter 76, s. 5 or these Regulations, the Board of Education may take such action as it sees fit, including, but not limited to, withholding of funds or referral of the matter to the Office of the Attorney General for appropriate legal action.

Mr. PARROTT. I think the problems that the State is having with getting them adopted is that the vocational education people, the administrators, are finding it very difficult to accept regulations which attempt to set up quotas or really permit up to 50 percent or many of the traditionally male courses being balanced.

Mrs. CHRISTOLM. Thank you very much. I will now recognize Mr. Pressler at this time.

Mr. PRESSLER. I am going to vote in just a moment. I guess we all are. I wonder if you could send me or respond here with some examples of the affirmative action programs you are talking about that would apply to some of the situations in my district. I would like to get some specific examples of what you talked about.

Mr. PARROTT. Yes. I will be very happy to submit added suggestions on affirmative action programs. I think there are a couple of facts that have to be recognized. One relates to teacher education and the status of teachers, be they male or female, in general.

That is, as many States have noted and as has been noted by the Office of Education, the demand for new teachers is drastically

down, particularly at the secondary level. As teachers become more unionized and have packages that relate to tenure, you are going to get, I think, an aging teacher force with locked-in societal values, and I think, unless—and this is what I would say would be a part of the affirmative action program. Unless States recognize this and really program inservice training to begin to hit at some of these issues, then the problem is going to be very hard to resolve.

Now, again, here, the use of Federal funds to 100-percent support inservice training, I think, is a misuse of funds. I think there has to be some more than gentle persuasion to convince them that they ought to be using State and local moneys to develop affirmative action programs.

In the Commonwealth I have seen Federal funds used legally but really badly, because, for example, on the handicapped, on the disadvantaged—and I fear with money that are provided, especially for eliminating sex bias, that most of the money is going into research, since that is a very comfortable way to delay any real action, and that the service to students and service to society is delayed for another 4 or 5 years, and I feel that that has really happened with handicapped programs, particularly where States have spent millions of dollars looking at behavioral objectives and why people are trainable or what areas they are trainable in.

This hasn't really served the cause of training or educating more handicapped students.

Mrs. CHISHOLM. Thank you, Mr. Buchanan?

Mr. BUCHANAN. Thank you, Madam Chairperson. The General Accounting Office recently did a study on the Office of Education concerning vocational education, which was rather critical of their degree of supervision of what was in fact happening in the States.

Would you concur with the GAO report that there is a need for better supervision by the Office of Education and the State and National Advisory Council of what is in fact happening?

Mr. PARROTT. Of course the—I have read the GAO report. I have read the reaction by the Office of Education. I am familiar with the AVA stand on this. Maybe, since Massachusetts is not one of those States that was selected for investigation, I shouldn't comment, but I will.

I think it is fair to say that I am considered somewhat of a maverick in my own State by vocational administrators. I don't come from—I have not been educated in vocational education, although in the Navy I did a 21-week electronics program and at that time was a technician.

I think that what is needed is not only people who understand vocational education, but know how this fits into the general education program.

I think the GAO report was accurate insofar as it identified some real problems. I think that some of the criticisms about the statistical base or the data base on which some of the conclusions were based is perhaps—and the States that were involved would have to attest to the accuracy of those.

I would say that the same criticisms of that report greeted our first report 2 years ago. That was the first report in which we really

started identifying some of the issues. I think the issues that were identified were very real, and I would say that those relate also to Massachusetts.

Now, State advisory councils came into some modest criticism in the GAO report. Our power is somewhat tenuous. We only participate. We have no authority to do anything on the State plan. We are required to certify, but we don't certify the State plan. We certify that we have participated in the State plan.

In terms of the key thrust of most councils' evaluation, again we are advisory to the State board. Now I think in Massachusetts we have a very active and interested State board. We are one of the few State boards that have a madam chairperson. She has just stepped down. We now have a chairman. We have articulate and good representation from women, and one of those women—Two of the women serve on a special subcommittee on the State board of vocational education and are very active in making these changes.

Mrs. CHISHOLM. Go ahead.

Mr. BUCHANAN. Perhaps for the record Ms. Fabian—No, Ms. Rideout—you are Rideout?

Ms. RIDEOUT. Yes.

Mr. BUCHANAN. I am very interested in your "survival for singles" program and the degree of acceptance that it has found, and I am also interested in the whole idea of how you get human attitudes to change so that you can have skills encouraged for both young men and young women.

Has this been generally pretty well accepted by your peer group as a good thing?

Ms. RIDEOUT. The courses that we have instituted have been very well accepted. Yes. When we instituted a course like "survival for singles," we have seemed to attract a lot of males who otherwise wouldn't take a home economics course or a cooking course per se.

I mentioned two kinds of attitudinal barriers. First, with the students; second, with the administration. The way to change—one of the ways is through elementary school or preschool using the kinds of games that were demonstrated up here before. I strongly support those, and I think changing the attitudes early is one of the ways.

The only time that there are student attitudes that prohibit females from getting ahead is when the girls try to go ahead and challenge something that might take something away from the males, and that is when it bothers them.

For example, in the athletic program, I know when the female athletes are trying to get more money, more programs, at times they do encounter barriers from their male peers, but I think the support basically is there.

I would like to submit the article for the record.

Mrs. CHISHOLM. Without objection it will be included.

[The document referred to follows:]

This is the document referred to by Ms. Rideout outlining the "Survival for Singles" course about which Mr. Buchanan asked. The material is from *Kaleidoscope* 13, "A Special Issue: What to Do About 622". Winter 1975, published by the Mass. Dept. of Education, Bureau of Equal Educational Opportunity, Office of the Commissioner.

## SENIOR HIGH SCHOOLS

## 37. SURVIVAL FOR SINGLES

(Silver Lake Regional High School, Pembroke St., Kingston 02361)

*Superintendent:* Francis M. Moran.

*Reported by:* Beth Kurowski and Marjorie Little, Teachers.

*Information Contact:* Norman G. Long, Coordinator, 617-585-3544.

*Administrative Contact:* Albert F. Argenziano, Principal, 617-585-6544.

*Program began:* September 1974.

*People involved:* 1 staff, 21 students.

Survival for Singles is a semester coed senior course offered through the Home Economics Department. The main objective of the course is to make students more aware of the rights, responsibilities, and problems that they face as young adults.

We study a variety of subjects based on the students' needs and interests. This semester the students have indicated an interest to study the following topics: apartment hunting, buying a car, personal money management, banking services, careers and jobs, alcoholism and drugs, and new lifestyles. Having both male and female opinions on the various topics leads to very interesting discussions.

A course in Survival Cooking is offered to senior students who haven't had a chance before to take a foods class and for those who had no interest until faced with the thought of cooking their own meals. The choice of recipes covers a broad sampling of foods that are popular and moderately priced; from pan-cakes and syrup to lasagna and yeast breads, as well as traditional desserts.

The classes have students of both sexes working pleasantly together. So far, we've had no identity crises over a boy wearing an apron and washing dishes or a girl sweeping the floor. All jobs are interchanged from day to day. The learning is active as the students develop skills in the use of equipment and cooking techniques. Our end product is people who can better deal with the daily event of preparing foods they enjoy.

*Editor's Note:* A similar program is scheduled to begin in the spring of 1975 at Milton High School, Central Ave., Milton 02186. Further information may be obtained from Roger Connor, Principal, 617-696-7220.

Ms. RIDEOUT. The carpentry course has been received very well by the female students. There is a lot of enthusiasm.

Mr. BUCHANAN. Thank you.

Mrs. CHISHOLM. Mr. Mosse.

Mr. Mosse. Thank you, Madam Chairperson I would like to thank the female witnesses for having brought Mr. Parrot with them to testify. I would like to address my question to the two ladies.

It is refreshing to have witnesses who are able to view this problem prospectively and not retrospectively, as we all are forced to do. I wonder with what frequency you may have heard your female peers expressing or lamenting the fact that they have not had courses made available to them in the traditionally technical male areas?

Do you at times discuss that? How often do you discuss it? What are the issues that are raised?

Ms. FABIAN. The vocalization I have heard is in two areas. In Chelmsford primarily, when the budget came out last year and we found that boys' sports were getting \$5,500 and girls' sports were getting \$1,200, some girls got together and protested, and they got into not necessarily bringing boys' budget down this year, but raising the girls' budget up. I don't know how they did that, but they managed to talk to the school committee and reason with them, so that is one area.

Another area is in the traditional history course. Some girls realized that the history courses they were learning from dealt with pri-

marily male figures. They were learning about all the heroes and no heroines, so they got together again and they spoke with a certain teacher, and this certain teacher arranged to have a course on women in today's society. That has generated a lot of interest and they have a lot of students already in the course, and it won't be offered until next year, so those are the two areas in Chelmsford.

Mr. Mosse. Aside from curriculum and textbook types of issues, do the female students ever complain about the fact that they have not been allowed to run lathes or work in the woodshop, or do your counterparts complain that they have not been allowed to take home economics, or would people belittle them for that fact?

What I am driving at is this. We can sit up here all day and say that we want to provide equal opportunity for everyone, but practically speaking what is the desire of you whom we benefit, to have those opportunities made available?

Ms. FABIAN. Well, we don't have a vocational school in Chelmsford. Our vocational program is minimal, so really I am not too familiar with that.

Ms. RIDEOUT. To answer the first part of your question about whether or not I hear complaints on the part of female students when they can't get into programs, first of all, I do hear it on the curriculum level, but you don't want me to talk about that. I don't want to talk about it either.

In the vocational area, the courses are opening now, but, when the first female student tried to apply to get into the carpentry course, she had a very difficult time, and there was quite a bit of—she was told that she wasn't—did she really want to be working around all those machines? Did she really think she could hack it being out in the cold weather working on a house and things like that?

There was a lot of controversy over her joining the class, but, as soon as she was allowed to join, it was made possible that females were able to join, so it was not as much complaint on the part of female students about not being able to get into the courses, because they can get into courses now. I mean they are not denied the right to get into the courses.

I think that part of your question—I am not sure—was whether or not males might resent that when the females get in there.

Mr. Mosse. Do they?

Ms. RIDEOUT. To a certain degree, I think that is true. I don't know whether it is unfortunate or not, but the first female who did get into the carpentry course got pregnant and had to drop out, and there was quite a bit of resentment on their part, that the course had been filled then they allowed this first female to come in. What did she do but a typically female thing to do and have to leave?

Mr. Mosse. Madam Chairperson, I would hope to suggest for the record that the resultant pregnancy was not a direct by-product of the educational opportunity afforded.

[Laughter.]

Mrs. CHISHOLM. Thank you very much. Mr. Parrot, I would like to ask you a question. We have heard a great deal of testimony this morning as to the fact that we are living now in the 1970's and not the 1930's and 1940's, and, as we try to cope with the many problems in this area in our society, no matter how much legislation is written or no matter how much we may talk about giving courses, the in-

virtue of certain inequity of opportunity, it seems to me that we still have to continue to deal with attitudes, attitudes that have been inculcated in the minds of persons in the rest of society. Women have always been given prescribed roles and men have been given prescribed roles.

My question is this. We know that it is going to take quite some time for the general society to move in that direction, but what do you do with individuals, professionals in the particular field, who, by virtue of certain tenure rights, are not able—because of their own attitudes—to encourage and help people to see the variety of different kinds of careers and opportunities that are possibilities for them?

I have spoken recently with some teachers in vocational education, and they have attitudes and the patterns of behavior which are not conducive to the encouragement of new non-traditional courses of training for women.

How does one handle that? What are you going to do with these individuals who have tenure rights, and who have traditional attitudes?

Mr. PARROTT. That is a very loaded question, Madam Chairperson. I think there are a lot of things that can be done. I think that what you have said is right. In a traditional society, where change is considered illegitimate and you are faced with that, with very current problems, but looking at what has happened in education over the past few years, it is there.

Certainly—and I think there has to be another recognition that particularly in Massachusetts or in a State like Pennsylvania, that local initiative—this is it in education, and that the State, while it has something it can do with granting funds or withholding funds, has really got to do what I think State advisory councils and the National Advisory Council has to do. It has to provide leadership. It has to start becoming advocates because lacking any other power, the more you can motivate other groups to focus on some real issues—and I know that Joanne, Joanne Steiger, has recently left the National Advisory Council, but I have been working with one of the women council members, Margo Thornillel, to really start changing the guidelines under which we operate, and I think you have got to get States identifying the issues with which they are faced to get a better picture of what national problems are, because national problems in education arise out of what states and local communities are doing, and not the other way around.

I think that, although the National Advisory Council has done a lot, I think you get a very distorted view, as the Office of Education does, of what the States' problems are, by simply getting all of us to report back in a familiar format.

They found it very difficult when Massachusetts and New Jersey and New York and Pennsylvania changed theirs to start reflecting what the local problems were and then trying from that to gain something. In-service training has to be done, and that can be done with State funds, perhaps with some help from Federal funds, but that can't be the only thing.

I think that through State certification requirements, through building in accountability factors, we have review committees, two

or three persons within school districts, that begin to test classroom performance as it relates to sex bias, sex discriminating, and there are other issues that one can become concerned with, because it is the changing the mix, whether it is male or female bias, in terms of attitudes. It is very difficult to do.

The hardest nut to crack, of course, is parental attitudes. I just—I don't know what you can do on that. I like the Scandinavian system of the folk high schools where parents and older people periodically can request either training programs or are brought in at Government expense. I think it may not all be Government, but to really—an auto mechanic, a bank president, a housewife—come in together, talk about some of the issues.

That gets to be a very expensive program, but I am not sure how you change parental attitudes, unless it is through special effort. I think adult education is one way. I think the retraining of people that get to a career stop or in the automotive industry, for example—it will never rehire—I am showing my economic background—I think will never get back to the heyday of a few years ago, and you are faced with that whole retraining cycle, and I think, as you set up any of these programs that you set up, it has to have something in there dealing with changing societal values.

It suggests to me that not only do you continue with a forward program thrust in occupational education, but through the elementary and secondary education acts go back and start putting in funding at the kindergarten or pre-kindergarten level.

You cannot just do it all at once. I think you have to sort of work both ways. It takes time. It seems to me you don't wait 5 years and then do it. You have to start working with those problems now.

I think there are other things that States can do stemming from leadership and advocacy.

Mrs. CHISHOLM. Thank you. Mr. Miller?

Mr. MILLER. I would like to—just a couple of things, Madam Chairperson First of all, I mentioned the earlier testimony of Pamela Robey. I would like the testimony that she had originally prepared for submission to this committee entered into the record, if I might.

Mrs. CHISHOLM. Without objection the testimony will be made part of the record.

[Prepared statement referred to follows:]

#### VOCATIONAL EDUCATION AND WOMEN \*

(By Pamela Ann Roby, Associate Professor of Sociology, University of California—Santa Cruz)

#### VOCATIONAL EDUCATION

While college and university enrollments and the school age population have been leveling off or declining, vocational education has been booming. State

\* I wish to thank the many members of the National Academy of Sciences' Committee on Vocational Education Research and Development and James P. Mulherin who gave me suggestions and information for this paper.

I will use the term vocational education, as defined by the U.S. Congress in Section 108 of PL 90-576: vocational education "means vocational or technical training or retraining . . . given in schools or classes . . . under public supervision and control designed to prepare individuals for gainful employment as semi-skilled workers, technicians . . . subprofessionals in recognized . . . and in new and emerging occupations or . . . for enrollment in advanced technical education programs . . . excluding . . . professional or . . . a baccalaureate or higher degree."

vocational education enrollments increased from roughly 7.5 million to nearly 10 million from 1968 to 1972. Vocational education has been even more successful in terms of funding. Over the same years when enrollments increased by a third, the funding was more than doubled. In 1968 vocational education received \$262 million in federal and \$930 million in state and local funding, in 1972, the figures were \$464 million and \$2.2 billion, respectively.<sup>2</sup> In addition, the Higher Education Act of 1972 authorized \$950 million over the next 3 years for post-secondary occupational (i.e. vocational) education. This sum was over three times that authorized for the establishment of new community colleges and the expansion of old ones—\$275 million.<sup>3</sup>

#### WOMEN IN VOCATIONAL EDUCATION

During this period of growth, what impact has vocational education had on girls and women?<sup>4</sup> Most of the answer to this question is not known. However, a comparative study of vocational education by Kaufman *et al.* in 1967 concluded:

\*\*\* vocational education \*\*\* is being restricted by the prevailing stereotypes that restrict the vocational self concepts of young girls. \*\*\* It has been established for some time that there are no basic differences in intelligence between the sexes. When given the opportunity, women have proved they can handle almost any job that a man can. With the increasing demand for highly skilled individuals, society cannot long afford the waste of human resources caused by the prevailing limitations on the utilization of female abilities.<sup>5</sup>

More recently, the U.S. Department of Labor sponsored "Women in Apprenticeship Project" observed:

98.5% of the enrollees in Wisconsin High School industrial classes were male. The girls are given home economics or, if they are not on the college track, business subjects. In most schools girls are either overtly forbidden or subtly discouraged from seriously experimenting with shop courses that lay the foundation for work in the skilled trades: too great an interest in, or proficiency in, things technical are considered "unfeminine". This puts most women at a disadvantage when taking selection tests that examine familiarity with the tools and terms of the trade.<sup>6</sup>

Nationwide, of the 6.4 million women and girls enrolled in public vocational programs in 1972, the Women's Bureau of the U.S. Department of Labor has

<sup>2</sup> National and State Advisory Councils on Vocational Education. "The Impact of the Vocational Education Amendments of 1968," an unpublished mimeo prepared for the U.S. Congressional Oversight Hearings on the Vocational Education Act, April 1974.

<sup>3</sup> The money authorized by the Higher Education Act was specifically for training for "gainful employment as semi-skilled or skilled workers or technicians or subprofessionals in recognized occupations (including new and emerging occupations). It prohibited the funding of programs leading to a bachelor's degree." Jerome Karabel, "Protecting the Portals, Class and the Community College," *Social Policy*, Vol. 3, No. 1, May/June 1974, p. 15-6.

<sup>4</sup> Originally I intended this paper to be on the effect of vocational education on minorities as well as on women, but I found that the vocational education issue affecting the two groups are quite diverse. In fact, the effect of vocational education on and the needs of various minority groups are also highly varied. Therefore, in order to confine this paper to reasonable bounds, I am limiting it to women. I very much hope that others will address themselves to the effect of vocational education on various minority groups. Herbert Striner and Jacob Kaufman *et al.* have begun this effort. See Herbert E. Striner, *Toward a Fundamental Program for the Training, Employment and Economic Equity of the American Indian*, Washington, D.C., The Ujahn Institute, 1968, pp. 303-304. Jacob J. Kaufman, Carl J. Schaefer, Morgan V. Lewis, David W. Stevens, and Elaine W. Hense, *The Role of Secondary Schools in the Preparation of Youth for Employment. A Comparative Study of the Vocational, Academic and General Curricula*, University Park, Penn., Institute for Research on Human Resources, 1967, chapter 9, "The Negro and Vocational Education." A recent U.S. Office of Civil Rights sampling of 79 area vocational schools in Illinois, Indiana, Michigan and Ohio found that only 135 of the 2,612 instructors in these schools were minority members (5.3%) despite the facts that the minority population of these four states is more than 10%, the representation of minorities among all the public elementary and secondary teachers of these four states approaches 10%, and minorities are a high proportion of the work force at all levels of skill and competence in these states. Peter E. Holmes, Director, Office for Civil Rights, U.S. Department of Health, Education and Welfare, "Enforcement of Civil Rights Statutes in Area Vocational-Technical Schools," paper prepared for the Annual Meeting of State Directors of Vocational Education, Washington, D.C., May 1, 1974, p. 11.

<sup>5</sup> Kaufman *et al.*, *op. cit.*, p. 10-13; cf. Bernard M. McAllister, *Curriculum Selection and Success of Tenth Grade Girls as Related to Selected Ninth Grade Characteristics*, University Park, Penn., Vocational Development Studies Monograph No. 9, Pennsylvania State University Department of Vocational Education, 1973.

<sup>6</sup> Manpower Administration, U.S. Department of Labor, *Women in Apprenticeship—Why Not? Manpower Research Monograph No. 33*, Washington, D.C.: U.S. Government Printing Office, 1974, p. 1.

reported 50% were being trained in home economics and another 30% in office practices. Very few were being prepared for trades industry, health occupations other than nursing, or technical jobs. In addition, while females comprised 63% of the students enrolled in secondary vocational education programs, they comprised only 39% of those enrolled in post-secondary vocational education programs and 46% of those enrolled in adult vocational education programs in the U.S. in 1972. The Bureau reported further that while little effort is being made to guide women into higher paying, less female-stereotyped occupations, the National Planning Association estimates that by 1980, 20.1 million job openings will occur in primarily traditionally male occupations for which high schools offer vocational courses with entry-level preparation.

#### WOMEN'S VOCATIONAL EDUCATION NEEDS AND THE LAW

In 1974, 45% of all women aged 16 years and over were part of the labor force. These women comprised 69% of the total labor force as compared with 26% in 1940. Most of these women, the U.S. Department of Labor has reported, work because they must. In March 1973, of the 24 million women in the labor force, over half were either single, widowed, divorced or separated or had husbands whose incomes were less than \$5,000 a year. Another 7 million were married to men with incomes between \$5,000 and \$7,000—incomes which fell below the Bureau of Labor Statistics' criteria for even a low standard of living for an urban family of four. Most of these working women had low wages. The full-time year-round (50 to 52 weeks a year, 37 hours or more a week) median, before-tax wage of female operatives was \$5.921, of service workers (except private-household), \$4.896; and of non-farm laborers, \$4.755 in 1972.<sup>1</sup>

Unequal pay for equal work, though important, is only a small part of the larger question of why women workers receive low wages, according to economist Mary Stevenson. Following an extensive analysis of census data, she has concluded that sex segregation in labor markets is the real problem underlying the low wages that women receive. . . . Whenever women are cordoned off into a circumscribed number of occupations and industries, the consequences are low wages. . . . In line with Stevenson's conclusions, Elizabeth Waldman and Beverly McEaddy have recently reported that although women, like men, find jobs in the fastest growing industries, today, as in decades past, no matter what industry women are in, they remain clustered in fewer and lower paying occupations than men.<sup>2</sup> According to a 1970 tabulation by the Bureau of the Census, for example, of the more than 270 distinct occupations reviewed in 1969, half of all women

<sup>1</sup> Females comprised 77% of the students enrolled in technical programs, 10.9% of those in trade and industry programs, 57.7% of those in health, 92.5% of those in home economics and 75.7% of those in office programs in the U.S. in 1972. Elizabeth Camp King, *Perceptions of Female Vocational Facility Members as seen by Therapists and College Administrators*, Bureau of Vocational Education, Pennsylvania Department of Education, 1972, p. 17.

<sup>2</sup> King, *ibid.*, p. 18.

<sup>3</sup> U.S. Department of Labor, Women's Bureau, "Issues in Vocational Training for Women and Girls," Washington, D.C. stencil, December 1973; cf. Kaufman et al., pp. 5-23, 27-36.

<sup>4</sup> Cited by U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, Vol. 30, No. 11, May 1974, Table S20 and S21, pp. 22-23.

<sup>5</sup> U.S. Department of Labor, Women's Bureau, "The Women Work," Revised Washington, D.C. U.S. Government Printing Office, March 1974. The Bureau of Labor Statistics' lower budget income standard was \$5,151, intermediate budget, \$12,626, and "high budget," \$18,291, for an urban family of 4 in autumn 1973. U.S. Department of Labor, Bureau of Labor Statistics, "Autumn 1973 Urban Family Budgets and Comparative Indexes for Selected Urban Areas," June 16, 1973 press release, Table A, p. 2. For a description of the concepts and procedures used in the development of the BLS budget see U.S. Department of Labor, Bureau of Labor Statistics, "Three Standards of Living for an Urban Family of Four Persons," Bulletin No. 1570-5, Washington, D.C. U.S. Government Printing Office, 1969, pp. 1-4.

<sup>6</sup> U.S. Department of Labor, Women's Bureau, *Advanced Tables*, stencil. The full-time year-round median before-tax wage of female sales workers was \$4.575, of non-farm laborers, \$4.755, and of craft workers, \$5.731 in 1972.

<sup>7</sup> Mary Stevenson, "Women's Wages: The Cost of Being Female," paper presented to the Society for the Study of Social Problems, August 1972, p. 8. Cf. Mary Stevenson, *The Determinants of Low Wages for Women Workers*, Ann Arbor, Michigan Department of Economics, University of Michigan, Ph.D. Dissertation, 1974; Barry Bluestone, William M. Marable, and Mary Stevenson, *Low Wages and the Working Poor*, Ann Arbor, Michigan, The Institute of Labor and Industrial Relations, The University of Michigan, 1973; R. Bergman, "Occupational Segregation, Wages and Profits When Employers Discriminate for Race or Sex," *Journal of Political Economy*, March-April, 1971.

<sup>8</sup> Figures for hourly wages which exclude the effect of part-time and overtime work, support conclusions based on weekly earnings. Elizabeth Waldman and Beverly J. McEaddy, "Where Women Work—An Analysis by Industry and Occupation," *Monthly Labor Review*, Vol. 97, No. 5, May 1974, p. 7.

workers were employed in only 21 occupations as compared with the first 50% of male workers who were dispersed over 65 or three times as many occupations.<sup>15</sup>

Furthermore, female-intensive industries continue to be considerably lower paying than male intensive industries. For example, Waldman and McEaddy report:

In January 1973, most industries paying average weekly earnings of less than \$100 were female-intensive. Several were paying under \$90 a week, while the weekly paycheck for all industries averaged \$138. The average salary for all manufacturing workers was \$150 a week in January 1973. For those in manufacturing industries that were female-intensive, the average was much lower—for example the apparel industry, in which 81% of the employees were women, paid average weekly salaries of only \$93.<sup>16</sup>

Recently women have been breaking into the higher paying skilled trades in greater numbers, but the percentage of women workers in these jobs remains small (1.6% of women workers over age 16 were employed in craft and kindred jobs in May 1974).<sup>17</sup>

Social discrimination in educational programs and industrial hiring rather than aptitude has barred women from these skilled jobs. Extensive studies by the Human Engineering Laboratory of the Johnson O'Connor Research Foundation show that many women have the aptitudes to perform jobs that have been dominated by men. In fact the research indicates that no significant sex differences exist in 14 of the aptitude and knowledge areas studied, and of the remaining areas, men excel in 2 and women in 4.<sup>18</sup>

While increasing numbers of women need to earn wages adequate to support themselves and their families and while the cordoning off of women in a limited number of occupations has been shown to contribute significantly to their low wages, vocational education as described above has not actively encouraged women to prepare for and enter higher paying, stereotypically male occupations. Vocational education teachers and counselors have in fact often actively discouraged women from taking these courses or actually refusing to allow them to do so. At other times they simply mislead women students by allowing or encouraging them to believe that as wives and mothers they will not need to work when in fact their husbands are unlikely to be able to support a family alone, and by neglecting discussion of current divorce rates and the corresponding high probability that women students as young adults will have to support themselves and their children.

Eradicating these and other barriers to women and girls in vocational education is no longer a matter of gallantry but a matter of law. Title IX of the 1972 U.S. Education Amendment states:

No persons in the United States shall, on the basis of sex, be excluded from participating in, be denied the benefits of or be subjected to discrimination under any educational program or excluded from actively receiving federal financial assistance . . .<sup>19</sup>

This passage as well as the subsequent anti-discrimination provision with regard to admission, student assignment and faculty employment practices applied to public or private institutions of vocational education.

#### ERADICATING BARRIERS TO WOMEN IN VOCATIONAL EDUCATION. PROPOSALS FOR RESEARCH AND DEVELOPMENT

\*\*\* prejudices and outmoded customs act as barriers to the full realization of women's basic rights which should be respected and fostered as part of our Nation's commitment to human dignity, freedom, and democracy \*\*\*.

<sup>15</sup> Mary L. Ellis, "Women in Technical Education," *Technical Education News*, Vol. 51, No. 2, April 1972, p. 5.

<sup>16</sup> Waldman and McEaddy *op. cit.*, p. 10.

<sup>17</sup> In 1970 almost half a million women were working in skilled occupations, up from 277,000 in 1960. The rate of increase (about 80%) was twice that for women in all occupations and 8 times the rate of increase for men in the skilled trades. Janice Newport Hodges and Stephen E. Bemis, "Sex Stereotyping: Its Decline in Skilled Trades," *Monthly Labor Review*, Vol. 97, No. 5, May 1974, p. 14. 524,000 females over age 16 were working in craft and kindred jobs in May 1974. U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings: June 1974*, Washington, D.C.: U.S. Government Printing Office, 1974, Tables 820 and 821, pp. 51 and 52.

<sup>18</sup> Jon J. Durkin, *The Potential of Women*, Research Bulletin 87, Washington, D.C.: John O'Connor Research Foundation, 1972.

<sup>19</sup> Title IX, "Prohibition of Sex Discrimination," U.S. Education Amendments of 1972, Public Law 92-318, 92nd Congress, S. 659, June 23, 1972. Proposed Rules, Department of Health, Education and Welfare, Office of the Secretary, Education Programs, Non-discrimination on the Basis of Sex," *Federal Register*, Vol. 39, No. 120, Part II, June 20, 1974, pp. 22228-40.

workers were employed in only 21 occupations as compared with the first 70% of male workers who were dispersed over 65 or three times as many occupations.

Furthermore, female-intensive industries continue to be considerably lower paying than male intensive industries. For example, Waldman and McEaddy report

In January 1973 most industries paying average weekly earnings of less than \$100 were female-intensive. Several were paying under \$80 a week, while the weekly paycheck for all industries averaged \$138. The average salary for all manufacturing workers was \$159 a week in January 1973. For those in manufacturing industries that were female-intensive, the average was much lower - for example the apparel industry, in which 81% of the employees were women, paid average weekly salaries of only \$93.

Recently women have been breaking into the higher paying skilled trades in greater numbers, but the percentage of women workers in these jobs remains small - 16% of women workers over age 16 were employed in craft and kindred jobs in May 1974).

Social discrimination in educational programs and industrial hiring rather than aptitude has barred women from these skilled jobs. Extensive studies by the Human Engineering Laboratory of the Johnson O'Connor Research Foundation show that many women have the aptitudes to perform jobs that have been dominated by men. In fact the research indicates that no significant sex differences exist in 14 of the aptitude and knowledge areas studied, and of the remaining areas, men excel in 2 and women in 4.

While increasing numbers of women need to earn wages adequate to support themselves and their families and while the crowding off of women in a limited number of occupations has been shown to contribute significantly to their low wages, vocational education as described above has not actively encouraged women to prepare for and enter higher paying, stereotypically male occupations. Vocational education planners and counselors have in fact often actively discouraged women from taking these courses or actually refusing to allow them to do so. At other times they simply mislead women students by allowing or encouraging them to believe that as wives and mothers they will not need to work when in fact their husbands are unlikely to be able to support a family alone, and by neglecting discussion of current divorce rates and the corresponding high probability that women students as young adults will have to support themselves and their children.

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#### ERADICATING BARRIERS TO WOMEN IN VOCATIONAL EDUCATION: PROPOSALS FOR RESEARCH AND DEVELOPMENT

... prejudices and outmoded customs act as barriers to the full realization of women's basic rights which should be respected and fostered as part of our Nation's commitment to human dignity, freedom, and democracy ...

-Mar. L. Ellis, "Women in Technical Education," *Technical Education News*, Vol. 57, No. 2, April 1972, p. 5.

-W. Waldman and McEaddy, op. cit., p. 10.

-In 1974 almost half a million women were working in skilled occupations, up from 277,000 in 1960. The rate of increase, about 50%, was twice that for women in all occupations and 8 times the rate of increase for men in the skilled trades. (Lester K. Hart, Holmes, and Stephen E. Parris, "Sex Stereotyping: Its Decline in Skilled Trades," *Monthly Labor Review*, Vol. 97, No. 5, May 1974, p. 1; 524,000 females over age 14 were working in craft and kindred jobs in May 1974. U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, June 1974, Washington, D.C., U.S. Government Printing Office, 1974, Tables 20 and 821, pp. 21 and 32.

-Jon V. Dorkin, *The Potential of Women*, Research Bulletin 57, Washington, D.C.: John O'Connor Research Foundation, 1972.

-Title IX, "Prohibition of Sex Discrimination," U.S. Education Amendments of 1972, Public Law 92-318, 92nd Congress, S. 659, June 23, 1972. Proposed Rules, Department of Health, Education and Welfare, Office of the Secretary, Education Programs, Non-discrimination on the Basis of Sex, *Federal Register*, Vol. 39, No. 129, Part II, June 20, 1974, pp. 22223-40.

(John F. Kennedy, in establishing the President's Commission on the status of Women, 1961.)

Elsewhere I have written about internalized and institutional barriers to women in higher education.<sup>20</sup> Similar factors operate in vocational education. Internalized barriers refer to social attitudes, norms and prejudices taught both men and women concerning 'feminine' and 'masculine' behavior which when internalized limit both sexes' ability to think flexibly about their actions, activities and social roles.<sup>21</sup> Women students who enter vocational education today received their first bit of socialization concerning sex roles when, as newborn infants, they were carefully wrapped in pretty pink blankets. Later as young children, they were encouraged by their families to play house, take care of their baby dolls, and act like "ladies." "Masculine" traits such as physical and intellectual prowess, problem-solving ability, and overt hostility, while encouraged in their brothers, were severely discouraged in them. Their grade school teachers continued to socialize them to their roles.<sup>22</sup> Despite the increasing proportion of mothers in the national labor force, their grade-school readers seldom, if ever, portrayed mothers at work.

Obviously affirmative action should begin with girls at an early age. In order that girls may later be able to flexibly consider a wide range of vocational choices from homemaking to tool and die making, they should be told stories in kindergarten, grade school and Girl Scouts about women's move into traditionally male occupations as well as about women in traditionally female positions. Text books and other curricular material as well as the media should be rid of sex stereotypes. Girls as well as boys should be encouraged to exercise not only so that they may develop strength in order to qualify for jobs which require it, but also for their general health. If affirmative action does not begin early and girls enter ninth grade with a set of internalized barriers, vocational education programs through the steps suggested below can help girls rethink their sex stereotypes, consider feminine sex roles more flexibly, and become aware of expanded occupational opportunities.

Internalized barriers to women are buttressed by and buttress institutional barriers. Institutional barriers refer to those organizational patterns and practices in vocational education which hinder or halt female students in their efforts to obtain a variety of types of vocational education including preparation for technical jobs, the trades, and industry. These institutional barriers include practices pertaining to the admission of girls to traditionally male vocational education courses and of pregnant girls to vocational education of any type, to the sexist manner in which some instructors stereotype the content of their courses as "masculine" or "feminine", to the composition of faculties, counselors and administrators, to inadequate job counseling given girls, to the granting of financial aid in post-secondary vocational education programs, and to inadequate child care for children of students.

In the paragraphs to follow we will trace the paths open to vocational education students. For each path we will examine barriers to women, review vocational education research related to the barriers and suggest research and development projects to overcome the barriers. Chart 1 diagrams the steps in the vocational education process at which educators and others may intervene to expand vocational opportunities for women.

**Admission**—The first hurdle which confronts girls and women seeking vocational education is that of admission. Females of course must fulfill all the admission criteria concerning intelligence and educational experience normally required of men. In addition, however, female applicants frequently find them-

<sup>20</sup> Pamela Rohr, "Structural and Internalized Barriers to Women in Higher Education," in Constantina Safotis Rothschild (ed.), *Toward a Sociology of Women*, Lexington, Mass., Xerox College Publishing, 1972, pp. 121-140. Pamela Rohr, "Institutional Barriers to Women Students in Higher Education," in Alice S. Rossi and Ann Calderwood (eds.), *Academic Women on the Move*, New York, Russell Sage Foundation, 1973, pp. 27-38.

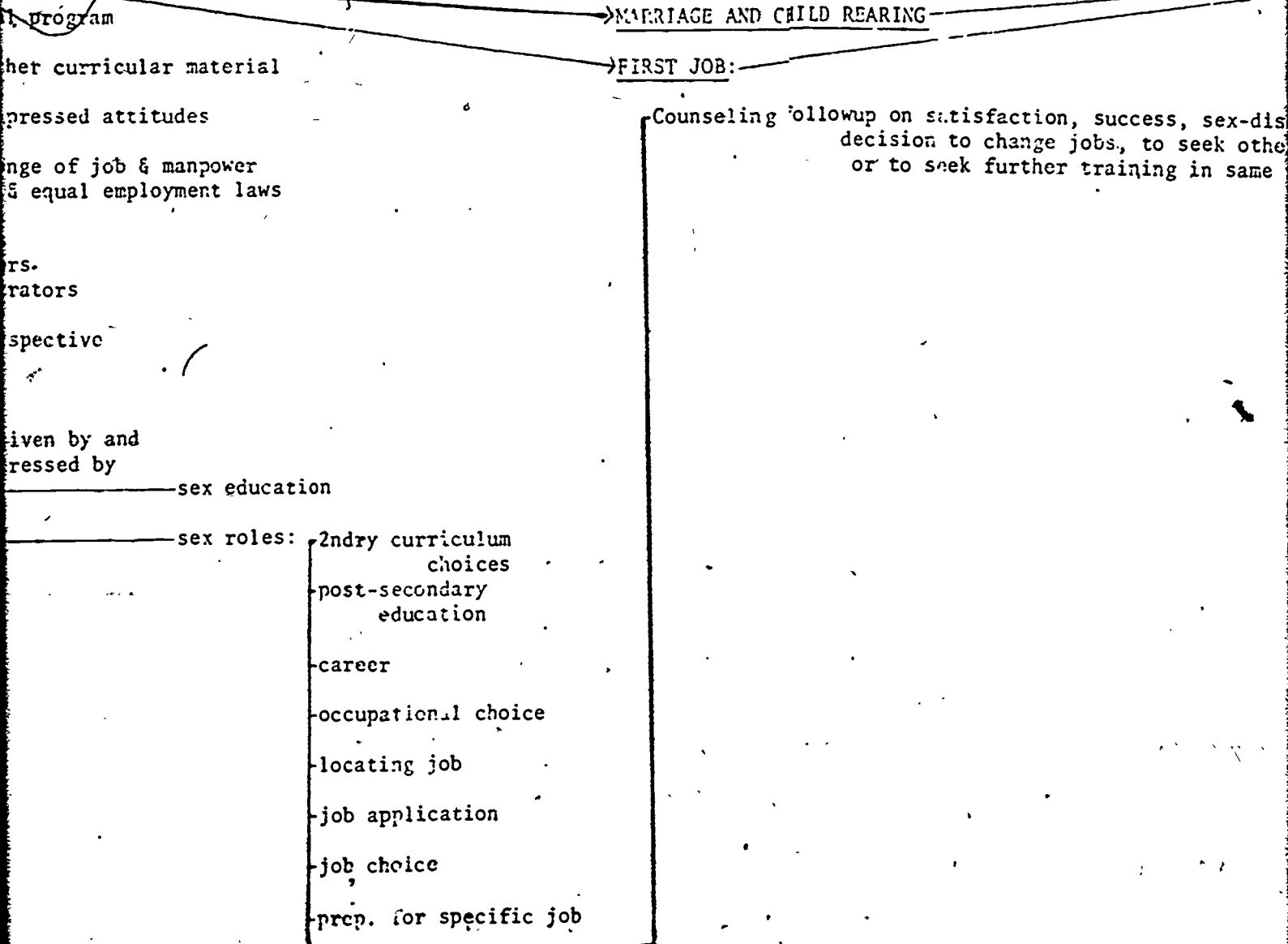
<sup>21</sup> See Leonore J. Weltzman, Deborah Elfer, Elizabeth Hoksda and Catherine Ross, "Sex Role Socialization in Picture Books for Preschool Children," *American Journal of Sociology*, Vol. 77, No. 6, May 1972; Sandra L. Bem and David J. Bem, "Training the Women to Know Her Place," Kathleen Barry, "A View from the Doll Corner," Leah Heron, "Children's Books," Jamie E. Frisof, "Textbooks and Conditioning," and Donna Kerk, "The Art of Maiming Women" all in *Women*, Vol. 1, No. 1, Fall 1960. Elizabeth Foster, "Children's Books," *The Second Sex Junior Division*, New York Times Book Review, 1970, pp. 60-64; Ruth Martley and A. Kelvin, "Sex Role Concepts among Elementary School-Age Girls," *Marriage and Family Living*, Vol. 21, February 1959, pp. 59-63; and Ann Ellsberg, "Are You Hurting Your Daughter Without Knowing It?" *Family Circle*, February 1971.

PRE-VOCATIONAL EDUCATION SOCIALIZATION:

- Family:
  - does mother work
  - expressed parental attitudes
- School:
  - stories, texts
  - teachers' statements
  - career and curricular counseling
- Television and other media
- Friends
- Organizations: church, Scouts, etc.

SECONDARY VOCATIONAL EDUCATION:

- Admission: non-traditional/traditional program
- Instruction:
  - content:
    - texts and other curriculum
    - teachers' expressed attitudes
    - course on range of jobs & projections & equal employment
  - role models:
    - teachers
    - counselors
    - administrators
- Counseling:
  - % female for female perspective
  - content:
    - literature
    - information given by and attitudes expressed by counselor on



satisfaction, success, sex-discrimination,  
to change jobs, to seek other training,  
seek further training in same field

POST-SECONDARY EDUCATION:

Notification of Programs

Counseling: admission  
curriculum

Admission

Enrollment Feasibility: accessibility  
financial aid  
part-time education  
child care  
degree requirements

Instruction: content: texts and other curricular materials  
teachers' expressed attitudes  
role models: teachers  
counselors  
administrators

Counseling: new career decisions  
family decisions  
facilitation of group support  
facilitation of return to education.  
facilitation of return to labor force:

→ JOB:

Counseling followup on satisfaction, efforts to obtain promotion, success on job, sex discrimination on job

ation

ments

er curricular material  
ressed attitudes

s  
ators

pport

o education

labor force: organization of family  
and social life .  
-locating job  
-application and interview  
-job choice

selves faced with barriers never experienced by men during the admission process. Jack Conrad Willers, Professor of Education at the George Peabody College for Teachers has observed that "the most obvious and common sexist school practice is to track male students into industrial arts, agriculture and technical trades, and female students into homemaking, health occupations, and business. High school girls receive vocational training which prepares them for a very limited range of careers, usually those with low pay potentials, or even no pay as housewives."<sup>22</sup>

Despite the federal law against sex discrimination in vocational education, tracking of girls often occurs because schools are for boys only, or because male teachers simply refuse to allow girls in their classes. Peter Holmes, Director of the Office of Civil Rights of the U.S. Department of Health, Education and Welfare recently reported findings of his office's survey of area vocational schools. These showed that:

\*\*\* (a) chronic problem in area vocational schools is the separation of programs and courses by-sex. Even more serious is the existence of vocational schools that accept only students of one sex. So far the survey has identified 17 single-sex institutions and I estimate we will have reports on about 40, most of them in the Northeast where like other parts of the nation, some traditions do not change easily. Title IX of the Education Amendments provides for the elimination of vocational school policies that discriminate on the basis of sex. Their eligibility to participate in Federal programs is in danger until they adopt acceptable plans to transform themselves into institutions that admit both sexes without bias.\*\*\* The other aspect of sex discrimination in vocational schools has to do with segregation by course. Of the 1000 (Office of Civil Rights institutional questionnaire) forms surveyed so far, nearly all listed at least one course that was exclusive to one sex and nearly 60% reported that a majority of the course programs in the school were exclusively for males or exclusively for females.<sup>23</sup>

Stringent enforcement of the law rather than research is needed to end those forms of sex discrimination, and the U.S. Office of Civil Rights has now begun to enforce the law. Tracking of girls also results from counselors advising girls not to take traditionally male courses of study and from counselors failing to help girls reevaluate their sex stereotypes concerning curriculum choices. Counseling of girls and solution to these problems will be discussed at greater length below.

At the secondary school level, pregnant girls are confronted by additional barriers when they seek to remain in or be admitted to vocational programs in many parts of the nation. Only anecdotal information is currently available on the extent to which pregnant, physically able, girls are refused admission to or retention in secondary vocational programs. Research is needed to document this area of sex discrimination.

At the post-secondary level the admission process is more complex. Potential post-secondary female applicants are not sitting in school ready to simply enter one course of study or another. Instead they are scattered. Some are employed. Some are full-time housewives with infants or toddlers. Others have reared their children. Consequently, the first major question involved in the admission process of post-secondary vocational education programs is, who is notified of the program? Ignorance of a program's existence frequently prevent women from participating in it. The means by which post-secondary programs are publicized naturally affect who learns about them. If the publicity about a program is relayed primarily through announcements in secondary schools and workplaces, it is less likely to reach unemployed housewives than if it is relayed through posters in laundermats and churches, P.T.A. newsletters, television advertisements, or articles in the women's section of local newspapers. Likewise, at the workplace publicity about vocational education programs is less likely to reach women if it is related through posters placed in those areas of the shop where men traditionally work than if posters are placed in all women's as well as all men's rest rooms.

<sup>22</sup> Jack Conrad Willers, "The Impact of Women's Liberation on Sexist Education and Its Implications for Vocational-Technical and Career Education," paper delivered to the Regional Seminar/Workshop on Women in the World of Work conducted by the Technical Education Research Centers, stencil: Department of History and Philosophy of Education, George Peabody College for Teachers, Nashville, Tennessee, 1974, p. 8.

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The second question relating to post-secondary admission is, what impression does publicity concerning the program and the program itself make on its female audience? Are only men pictured on the posters? Is the word "he" but not "she" used to describe applicants? Has word gotten out that women students are ridiculed in particular programs? The third question is, how do post-secondary vocational admissions counselors advise women of various backgrounds? Do they recommend that mothers with young children not enter the program? Do they tell women "of course you can enroll in the industrial course, but I don't know why a good looking girl like you would want to"? The final question is, as at the secondary level, simply whether teachers and admissions officers will admit women to traditionally male courses of study.

*Enrollment.*—Following admission, women are confronted by a series of questions affecting the feasibility of their enrolling in a post-secondary vocational education program. Mothers are the hardest hit. Many women, especially those who are not part of a "two car family", may be barred from post-secondary programs by the schools' physical inaccessibility or inconvenient hours of operation. Locating programs near public transportation lines and decentralizing the operation of programs would enable larger numbers of women to take advantage of them.

Financial aid and child care are also crucial problems confronting many women who would like to enroll in post-secondary vocational education. Financial aid is a need of men as well as women, but because of cultural child rearing traditions, child care problems fall disproportionately on female potential students. In order that mothers of young children may have an equal opportunity to attend post-secondary vocational schools, the schools should provide child care at low or no cost. For the same reason, part-time education should be an option in all areas of vocational education. Finally, because wives traditionally follow their husbands, female students must move from city to city more often than men. Post-secondary education programs should have interchangeable degree/course credit requirements so that women who have to move from institution to institution will not be discriminated against by having to undertake a new set of degree requirements each time they move. The enrollment issues discussed above relate primarily to women interested in attending post-secondary vocational education programs, but they are increasingly affecting women who wish to complete high school programs and should therefore be of concern to secondary as well as post-secondary administrators and planners.

*Instruction.*—In school, students learn from the content of texts and other curricular material, from the information teachers convey and the attitudes they express, and from observing the role models who are available to them. Following a survey of secondary school curriculum, Janice Law Trecker concluded:

In perhaps no other area of the curriculum is there more need for non-stereotyped information and for positive role models for young women than in vocational training and career education \* \* \* traditional stereotypes about the proper work for women have combined with overt economic discrimination to greatly restrict the aspirations and opportunities of the female secondary school student. \* \* \* materials and programs which might enlarge the career possibilities and raise the aspirations of young women should be a high priority item in any responsible school program.<sup>21</sup>

Under a federally funded research project, vocational education texts and other curricular material ought to be systematically screened for sex stereotypes and other forms of sexism. Those which are found to be sexist should be replaced. The State of Illinois' Office of Vocational Education has recently released a request for a proposal (r.f.p.) for \$30,000 for the development of curriculum materials to encourage girls to consider a wider range of jobs. Revised editions of trade, technical, industrial, agricultural and home economics curricular materials which are free of sex stereotypes should also be developed and published.

Students' first year of secondary vocational education should include a course on manpower projections and their implications for students' occupational choices; and on federal and state equal employment laws. In Fall 1974, the U.S. Women's Bureau will publish *A Working Woman's Guide to Her Job Rights*. This brochure will be a useful basic text for the latter part of the course.

<sup>21</sup> Janice Law Trecker, "Sex Stereotyping in the Secondary School Curriculum," *Phi Delta Kappan*, Vol. LV, No. 2, October 1973, p. 112.

Students learn as much and perhaps more from an off-handed joke or a disparaging remark by a teacher as from the lesson he or she has planned. Over the last decade, teachers and others have fortunately begun to feel that racist jokes are inappropriate and harmful. Teachers must now be made aware that sexist jokes and comments are also inappropriate, harmful, and, when said in school, contrary to the non-discrimination clause of the 1972 Education Act quoted above.

Students also learn by simply observing who their teachers and administrators are. The absence of women in faculty and administrative positions outside of home economics, health and business related vocational programs serves as a silent but potent message to female students that "aiming high" would be foolish indeed. In public community colleges, Elizabeth Camp King has found, that women comprise approximately 29% of the total faculty and that 92% of the female vocational education faculty is concentrated in health (57%), business (28%), and home economics (7%).<sup>2</sup> The other vocational programs—agriculture, distribution, technical, and trades and industry—are dominated by male faculty.<sup>3</sup>

Only anecdotal information is now known about the percentage and distribution of female faculty at the high school level. This information suggests that the percentage and distribution of female vocational high school faculty are only slightly less biased than that at public community colleges.

Increasing national concern about the status and roles of professional women in vocational education has been reflected in several recently initiated research projects. In December 1972, the house of delegates of the American Vocational Association at its Chicago Convention passed a resolution that "the American Vocational Association Board of Directors authorize a study of professional employment in Vocational Education with regard to the number of males and females at every level of the profession, the salaries paid to each category of employee, and identify any restrictions in promotional opportunities because of sex."<sup>4</sup> Three additional studies are being conducted by The Vocational Education Department of Pennsylvania State University on female vocational faculty in randomly selected area vocational schools, comprehensive secondary schools and post-secondary proprietary schools.<sup>5</sup>

At high administrative and advisory council levels, women appear in only token numbers. Currently, no woman is employed as a State Director of Vocational Education or as a state supervisor outside of the fields of business, distribution, health and home economics.<sup>6</sup> Although women comprise over 50% of the voting population in every state of the union, fewer than 20% of the national and state vocational education advisory council members are women. One hundred and forty nine women and 802 men were members of state advisory councils on vocational education in 1974.<sup>7</sup> Four women (only one of whom is employed) and 17 men comprise the National Advisory Council on Vocational Education.<sup>8</sup> In addition to reinforcing the stereotype that women do not belong in positions of responsibility, the scarcity of women in high level vocational education administrative positions and on the national and state vocational education advisory councils results in issues of concern to women in vocational education being under-emphasized or totally neglected.

*Counseling.*—Counselors may play a large role in a vocational education student's life or never be seen by a student. Counselors may reinforce female student's thinking about curricular and career decisions, or encourage them to think more narrowly or more broadly about their decisions.

<sup>2</sup> Elizabeth Camp King, *op. cit.*, pp. 74-75.

<sup>3</sup> *Ibid.*, p. 73.

<sup>4</sup> *Ibid.*, preface.

<sup>5</sup> *Ibid.*, preface.

<sup>6</sup> Carol Karasik, "Women: The Job Ahead," Washington, D.C.: Technical Education Research Centers January 1974, p. 2.

<sup>7</sup> 108 Blacks (81 males), 25 Spanish surname (19 males), 17 American Indian (12 males), 15 "other" (Phillipinos, Orientals, Hawaiian—all males), and 846 Caucasians (735 males) comprised the state advisory councils on vocational education in 1974. Data from JoAnne Steiger, National Advisory Council on Vocational Education staff member, interview, August 9, 1974.

<sup>8</sup> The female members of the National Advisory Council on Vocational Education are JoAnne Cohen (student), Caroline Hughes, Margo Thornly, and Martha Bachman. JoAnne Steiger, *ibid.*

Like teachers and administrators, counselors serve as role models for students. The availability of female counselors allows girls to observe women in positions of responsibility and how they combine work and home roles.

Nonetheless, the importance of the attitudes and information male as well as female counselors convey to female students cannot be overemphasized.<sup>32</sup> Counselors relate information and attitudes to students by word of mouth, through the literature they distribute and the films they show. The literature and films used for counseling purposes should be "content analyzed" for sex bias. The omission of information concerning recent equal employment laws and opportunities for women in traditionally male occupations or concerning family planning may be as harmful as outright sexist pictures or remarks. The color film on women in apprenticeable occupations entitled "Never Under-estimate the Power of a Woman" which was produced by the U.S. Department of Labor sponsored Wisconsin Women in Apprenticeship Project and is available from the Wisconsin Employment Service should be considered a must for girls about to make vocational education choices.

Although guidance literature and films are important, counselors and other advisors convey information and attitudes to students primarily by word of mouth. For girls and women in secondary and post-secondary vocational education, sex education is an important part of career counseling. Without it, girls and young women all too often unexpectedly embark on child raising careers when they are neither prepared for motherhood nor for a career in the labor force to follow or supplement motherhood.<sup>33</sup>

Vocational counseling for labor force participation involves advising concerning at least a half dozen career related student decisions and actions at both the high school and post-secondary levels. For secondary school girls, these decisions and actions include curriculum choices, the decision to undertake immediately or to delay post-secondary education, selection of and application to a post-secondary institution, the decision to pursue a career in the labor force or to become a full-time homemaker, occupational choices, location of potential jobs, application and interviews for jobs, and selection of a job from various job offers.

Sex stereotyping and patriarchal attitudes may creep into the counseling process at any stage. Willer has advocated that:

\*\*\* Career educators can and should develop new curricular resources at all learning levels that do not through ignorance or thoughtlessness reinforce sexist standards and sex-role stereotypes. Vocational counselors particularly will have to be reeducated through in-service remedial programs.

Vocational programs must be "destereotyped" from top to bottom.<sup>34</sup>

What might non-sexist vocational education counseling look like? What research is needed to develop it? Kaufman's 1966 study provides considerable in-

<sup>32</sup> No in-depth study has been made of the effect of counseling in vocational education on girls' role development. A four year longitudinal study involving interviews and psychological tests of female undergraduate students was conducted at Stanford University. The data reported from the study show that "women students need special encouragement to develop intellectual, artistic and professional ambitions." The study revealed further that "an interested male has the power to communicate to the maturing young woman that she is not damaging her femininity by developing her mind and skills. Sometimes even a subtle form of consent or disapproval from a male served as a stimulus for a young woman to advance or retreat." Marjorie M. Lozoff, "Abstract of College Influences on the Role Development of Female Undergraduates," *Stanched*, Palo, Calif: Stanford Institute for the Study of Human Problems 1969, p. 3.

<sup>33</sup> In 1969 the year for which the most recent statistics are available, there were 176,500 births to unmarried girls age 19 and younger and about the same number of births to married girls which were conceived prior to marriage. Approximately three-fourths of these girls had not wanted to become pregnant. Many more girls with unwanted pregnancies resorted to abortions. Lee Morris, "Estimating the Need for Family Planning Services Among Unwed Teenagers," *Family Planning Perspectives* (F.P.P.), Vol. 1, No. 2, Spring 1974, p. 93. Cf. Sadja Goldsmith, Mary O. Garlickson, Ira Gabrielson, Vicki Matthews and Leah Potts, "Teenagers, Sex and Contraception," F.P.P., Vol. 1, No. 1, January 1972; Melvin Zelnic and John F. Kantner, "The Resolution of Teenage First Pregnancies," F.P.P., Vol. 6, No. 2, Spring 1974; Zelnic and Kantner, "Sexuality, Contraception, and Pregnancy Among Young Unwed Females in the United States," in C. F. Westoff and R. Parke (eds.), *Demographic and Social Aspects of Population Growth* Vol. I of Commission on Population Growth and the American Future Reports, Washington, D.C.: U.S. Government Printing Office, 1972; Mary E. Lane, "Contraception for Adolescents," F.P.P., Vol. 5, No. 1, Winter 1973; Elizabeth A. House and Sadja Goldsmith, "Planned Parenthood Services for the Young Teenager," F.P.P., Vol. 4, No. 2, April 1972; Jane Menken, "The Health and Social Consequences of Teenage Childbearing," F.P.P., Vol. 4, No. 3, Jan. 1972.

<sup>34</sup> Willer, *op cit.* p. 7; cf. Janice Neupert Hedges, "Women Workers and Manpower Demands in the 1970's," *Monthly Labor Review*, Vol. 93, No. 6, June 1970, p. 29.

formation concerning girls' high school curriculum choices. In Kaufman's sample, well over a third of the girls in vocational programs said that they received no guidance in course choices.<sup>2</sup> Despite long range projections predicting a surplus of beauty operators in some communities, nothing had been done to curtail cosmetology enrollments.<sup>3</sup> Furthermore, twice as many boys (39%) as girls (18%) said they selected their courses because they were interested in the subjects. Kaufman interpreted this finding as probably reflecting the limited offerings open to girls.<sup>4</sup>

Now nearly a decade has passed and the Kaufman study needs up-dating. A new study should devote more attention to the process of counseling, to exactly how counselors and teachers advise students, and to what steps in the counseling process most influence students.

In June 1974 Jacob Kaufman and Morgan Lewis, both of Pennsylvania State University's Institute for Research on Human Resources, began a study of "non-traditional vocational education programs for women." The project is addressed to the role vocational education can play in expanding the occupational opportunities available to young women. It proposes to locate and compare 10 secondary school vocational education programs which have succeeded in preparing young women for occupations which are traditionally considered as appropriate only for males. The data collected will be analyzed to attempt to identify any common factors or conditions which appear to be essential to the establishment of non-traditional programs for young women. In this effort the researchers will survey all state vocational education directors to find such secondary programs. During the first month of the project, 10 states were contacted and none were found to have such programs in operation. Most replied that they had recently begun to think about the need for this type of program.<sup>5</sup>

How might vocational education counseling be improved for female students? At a very minimum, counselors should be encouraged or required to attend summer institutes or in-service training programs on equal employment laws and on means of extending equal educational and employment opportunities to women. Also experimental demonstration research projects are obviously needed in vocational education counseling in order to find the best means of helping junior and senior high school girls consider a wide range of job possibilities, and of assisting them in selecting courses which will have long range usefulness.

Post-secondary vocational education considerations arise concurrently with or shortly after curriculum decisions. Although, as noted above, nearly two-thirds of high school vocational education students are female, slightly under 40% of post-secondary education students are female. Kaufman *et al.* found that at each I.Q. level a significantly larger percentage of males than females received post-secondary vocational training or education.<sup>6</sup> High school vocational counseling as well as cultural traditions probably accounts for the low proportion of girls who continue their education or training.

Considerations concerning the pros and cons of a career, of course, affect girls' post-secondary education decisions, and are also part of the early high school counseling and decision-making process. Vocational education career counseling should include guest lectures by women (preferably ones who have children, since they represent the majority of women in the labor force) who are employed in a wide range of traditionally male and traditionally female occupations. The lecturers should be encouraged to discuss their reasons for working, the nature of their jobs, their wages and benefits, and how they combine their work and home responsibilities. In many communities, chapters of the Coalition of Labor Union Women will happily recommend women as guest lecturers. Consciousness raising groups among vocational high school girls are also excellent means of enabling female students to discover for themselves who they are and what they personally want to do with their lives. The formation of these groups should initially be assisted by a woman experienced in them. In most communities, the Y.W.C.A. or chapters of the National Organization for Women will happily recommend women to help start consciousness raising

<sup>2</sup> Kaufman, *op cit.* p. 10-3.

<sup>3</sup> *Ibid.*, p. 5-34.

<sup>4</sup> *Ibid.*, pp. 6-2, 10-2

<sup>5</sup> Morgan V. Lewis, interview, August 5, 1974. The project is funded for \$110,000 under Section 131(a) Part C of the Vocational Education Amendment of 1968 and extends to December 25, 1975, Research Proposal, "Nontraditional Vocational Education Programs for Women."

<sup>6</sup> Cf. Jo Ann Gardner, "Sexist Counseling Must Stop," *Personnel and Guidance Journal*, 19, 1971, pp. 703-714.

groups. In localities where such guest lecturers and groups have not been considered previously as part of the vocational education career counseling process, demonstration projects involving both should be undertaken in order to plan and pave the way for their wider use.

Once a girl has decided to have a career, she must think about the type of occupation she would like to prepare for and enter. At this point in the counseling process, numerous barriers join together to inhibit girls in thinking flexibly about their choice of occupation and to discourage them from choosing a better paying career. Girls arrive at this point in their decision-making process with the internalized barriers described above and find that the curriculum, also described above, is limited for females. Extremely limited occupational counseling is added to these difficulties. Over two thirds of the girls in Kaufman's sample of vocational education secondary students reported receiving no guidance whatsoever on their job plans.<sup>40</sup> The occupational counseling which is offered is generally ill-informed. Indeed, as Bailey and Stadt point out, the knowledge base required for effective, informed occupational advising of girls has yet to be developed. They explain that "major theoretical formulations have not distinguished between the sexes, and empirical tests of these theories have been limited almost entirely to boys and men. Only a few studies have approached female vocational behavior from the standpoint of the currently accepted theories."<sup>41</sup> Certainly, as McAlister as well as Bailey and Stadt suggest, research should be undertaken on the manner in which females make career decisions and on how career advising processes for girls and women may be improved.<sup>42</sup>

Improved career advising for girls, Bailey and Stadt suggest, should begin with the concept of total life planning. Since, they write, a shift has occurred from the "traditionally organized family where the husband was the sole breadwinner and the wife was the sole homemaker, to multiple-role families in which both partners share responsibilities for the household tasks and for earning, . . . young women need to prepare for multiple roles during different periods of their lives."<sup>43</sup> Bailey and Stadt recommend two areas of attack for changing deeply ingrained occupational sex-role stereotypes. The first is to expose myths about women. The U.S. Department of Labor's handout entitled "The Myth and the Reality" provides accurate information in a readable form about such myths as "women work only for 'pin money,'" women cost companies more because they are "all more than male workers," and "men do not like to work for women supervisors."<sup>44</sup> The second area of attack is "expansion of educational programs and services to help girls and women become aware of the broader opportunities open to them." In this area, they suggest consciousness raising groups, also recommended above, and point out that these groups expedite "recognition of the fact that many of women's problems are universal and not individual" and that this recognition significantly accelerates "individual discovery and self-development."<sup>45</sup> To these areas of attack, I would add that vocational education counselors should provide girls with visits to a variety of industries so that they may learn not only about the nature of specific jobs but also what are the better and poorer paying jobs and better and poorer paying industries. Finally, counselors should assure that girls and women know for what occupations a need will exist 5, 10 and 20 years from now.<sup>46</sup>

Once women have chosen and prepared for an occupation, most want to find a job. In many communities, despite equal employment laws, few jobs are available to women in traditionally male occupations. Kaufman's study has shown that men are considerably more likely than women to obtain their first job through a personal or family friend. Because this "old boy" system maintains old prejudices and because many employers still have sexist inclinations of their own, vocational education counselors should develop strategies to change local employers' attitudes regarding the hiring of women and to increase the number of women they hire directly from vocational education schools for non-traditional occupations.

<sup>40</sup> Kaufman *op. cit.* pp. 10-14.

<sup>41</sup> Larry J. Bailey and Ronald W. Stadt, *Career Education: New Approaches to Human Development*, Bloomington, Illinois, McKnight Publishing Co., 1973, p. 110.

<sup>42</sup> McAlister *op. cit.* pp. 92-93.

<sup>43</sup> Bailey and Stadt, *op. cit.*, p. 143.

<sup>44</sup> U.S. Department of Labor, Women's Bureau "The Myth and the Reality," Washington, D.C.: U.S. Government Printing Office, 1971.

<sup>45</sup> Bailey and Stadt, *op. cit.*, p. 146.

<sup>46</sup> Sally Hillman Baker conducted an in-depth case study of a large New York City vocational high school of fashion. The study, the most comprehensive to date of the influences of vocational education processes.

Along with increasing employers' willingness to hire women and helping women students to find jobs, counselors should teach students techniques of applying and interviewing for jobs. Because of their early socialization, many women are overly modest about their abilities. They must be taught that a bit of honest boasting is called for on job applications and in interviews.

After female students have received several job offers, they need the assistance of counselors in learning how to evaluate various jobs and to choose the position which is best for them. Where possible, counselors should encourage local industries to establish big sister programs in traditionally male occupational areas. The big sisters, women experienced in a job area, can assist the vocational school graduates through their first weeks on their new jobs. Once female vocational school graduates have worked several months in traditionally male jobs, counselors should give them a follow-up call to learn how they might improve their counseling for other female students who wish to enter similar positions, and to assist the graduates with sex discrimination or other problems they may be facing on the job.

Post-secondary vocational education counselors have additional responsibilities to female students. Many women are ready to make new career decisions by the time they enter post-secondary schools. Because of their return to school, most must also do new organizational planning for their families. Female post-secondary students need occupational counseling similar to that discussed above for secondary students. In addition, most women who have returned to school after a period of being a non-student need special support. Counselors may assist them in reorganizing their families around their new student status, in returning to school, and in eventually returning to the labor force by facilitating the formation of groups of similarly situated women who can help one another through exchanging experiences. A school lounge of their own is especially important for women who may feel uncomfortable with or tire of students 10, 15, or 20 years younger than themselves.

#### CONCLUSION

##### *The Importance of Vocational Education Research and Development*

In fiscal year 1974, \$40 million were appropriated for vocational education research and development under the authority of the Vocational Education Amendments of 1968 (P.L. 90-576). These funds are administered by the Bureau of Occupational and Adult Education of the U.S. Office of Education. Additional sums were appropriated for vocational education research and development by the U.S. Department of Defense, the Department of Labor, the National Institute of Education, other federal agencies, the states independent of state administered federal funds, and private foundations.

Few of these funds have been devoted to projects directly related to the needs of women. In fiscal year 1974 out of the ninety-three federally funded projects under Section 131(a), Part C of the Vocational Education Amendments of 1968, for example, only one pertained directly to women (that, directed by Kaufman and Lewis, was discussed above). No projects on women were funded in 1974 under the federally administered Part I or the regionally administered Part D of the Amendments. Part D funds, according to Joyce Cook, Acting Chief of the Demonstrations Branch of the Bureau of Occupational and Adult Education, ILLEW., which sets policy for the regional administration of the funds, are to be used for research of relevance to a broad range of populations rather than to a specific population. However, at least one project on women, now funded by the National Science Foundation, has developed out of a project funded under Part D.

To date no survey has been made to determine what percent of the project directors funded under the Vocational Education Amendments are women. Such a survey would appear to be called for under Title 9 of the 1972 Education Amendments.

Given that approximately 7 million women and girls are enrolled in public vocational educational programs, that females comprise over half the students enrolled in vocational education programs, and that these women and girls confront the numerous forms of sex discrimination and problems described above, it is indeed surprising that so little vocational education research and development funding has been devoted to adjusting vocational education to their needs. Perhaps this lack has resulted from the lack of pressure for change within vocational education, a lack which in generalized form Herbert

Striner has suggested has resulted in less and weaker research than might be expected throughout the field as a whole. As compared with manpower, higher education and academic high schools, vocational education has been neglected by sociologists and economists who have examined and have helped bring the status of women to public attention in these other areas.

#### *How Can Women Influence Vocational Education?*

Discrimination against girls and women in any educational program is now prohibited by law. However, the passage of this or any other law has little meaning unless concerned citizens see to it that it is enforced. Given the lack of pressure for change within vocational education programs, the pressure must come from without. Locally and nationally the Coalition of Labor Union Women formed in March 1974 by a conference of 3,200 persons from 58 national and international unions, the 36,000 members of the National Organization for Women, the Women's Equity Action League which has influential in the writing and passage of much equal employment and equal education legislation for women, the Coalition of Neighborhood Women, and feminists within the American Vocational Association, along with feminist researchers and others should examine vocational education and press for the changes they find needed. They may make their opinions known to Congress by testifying before the U.S. House of Representatives General Education Subcommittee's Oversight Hearings on Vocational Education and by writing and visiting their own representatives and senators. They should not only make their opinions known to but should seek to increase the representation of feminists on local school boards, and state and national Advisory Councils on Vocational Education. Members of the National Advisory Council on Vocational Education are appointed by the White House and recommended by U.S. Senators. Women who have worked for the election of the United States 100 male senators might request their senator to recommend them or another individual concerned with vocational education for women for membership on the Advisory Council.

States administer their own plus much federal vocational education funding. Therefore, individuals and organizations concerned with increasing the benefits women receive from vocational education should also make their opinions known to their state legislators and state offices of vocational education.

Finally, given the existence of Title I- of the 1972 Educational Amendments, the U.S. Bureau of Occupational and Adult Education and other federal agencies administering funds for vocational education should examine how their distribution of funds has affected women and make appropriate adjustments in their funding practices. Should other pressing matters prevent the agencies from adequately examining and adjusting their practices in the near future, persons concerned with the impact of vocational education funding on women might encourage the agencies to do so by contacting their representatives about the matter and by bringing official complaints to the U.S. Office of Civil Rights.

Mr. MILLER. Thank you for the time. The question of inservice training, I know, is in the regulations. It requires that inservice training be provided and I think they say at least 10 grants must be given for this purpose, which would be training with regard to desegregation on the basis of sex, and it appears that the recipients of that inservice training would be teachers, counselors, and I think to some extent school board members.

I wonder if you might comment on whether or not we might get more bang for the buck if we gave students inservice training in terms of raising their consciousness and the options that are available to them, because I think—let me express my biases first. I think we may be dealing with one of the more conservative institutions in the country when we deal with the educational system, and I suggest that perhaps these two students and their classmates may bring more pressure to bear on the educational system and bring about a greater change if they are made aware of all their options as women, as to careers that are really available to them or should be.

I wonder if you would—all three of you may comment on that, whether you think it makes sense or what—

Ms. RIDEOUT. I would certainly agree with that. I hope it would be able to be done on both levels, with the staffs of the schools, with the educational system itself, and with the students.

I think besides consciousness raising kinds of things, there has to be something there once you have got your consciousness raised. I mean, you don't get it raised and then your expectations aren't fulfilled.

You know, you realize all the careers you have, and then you are just more frustrated because the courses aren't open to you and things like that.

I think secondly we need organizations that can work on behalf of students. I know when I tried to get things like the athletic budgets in our school leveled out on a more equal basis, I got really frustrated dealing with the school administration, and the hierarchy, and things like that.

It is really entangling and it can really put an individual student who is working for that kind of thing off, and I think in Massachusetts we are very lucky in that we have a Student Advisory Committee structure which is a five-member group which sits with the school committee, and there are also regional advisory councils which work with the Department of Education. We have a student service organization that has a sizable staff, maintains files and access to the legal office of the Department of Education, so that we can help students who are getting entangled in the school bureaucracy, like calling up their principals and talking to principals and sending them documents to help back them up, I think that kind of program in other States would help also besides just consciousness-raising groups.

Ms. FABIAN. If I could just add on to that, I think you are absolutely right. How can we go any place before we know where we are going first? We have got some people in individual high schools who know what they are doing, but in order to educate the rest of the people to what is going on, it is a very difficult process.

Mr. PARROTT. I think you have hit on a very important question. I realize that consumer advocacy is something that has really taken off in the past few years. Health, and welfare, perhaps is a little slower in education.

We have our council meeting almost monthly, and I attend some of the board of education meetings, and we all talk about what we are doing in the name of students and for students, although it is mostly to students.

We really never get enough input in a programmed way from consumers and from parents. The PTA's, other various associations that are set up for parents and teachers, is a way to really remove the focus of parental pressure from the administration and do it through a nice group, and I think that these are beginning to change in a healthy way.

We did two sample surveys 2 years ago that are in our 1973 annual report because we said two things. There were two consumer groups. We felt that we were not getting adequate reaction. One was the standard in vocational schools, and the other was the business and industry, the labor groups that hire these people.

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We came up with some startling things. One was that at least in Massachusetts most of the schools are such that a child has to decide in the eighth grade whether or not he wants to go into vocational education.

My feeling is that that is too early. That is not his decision, but a parent's decision really as to whether he goes into that program.

But we in sampling some 2,000 students in four schools found out that students were going into vocational education not on a positive way, because that is what they wanted. They wanted to get out of that damn academic drag which was not giving them anything, or they were sort of caught in the middle because a lot of the admissions criteria that are used in vocational schools again—I would refer to Massachusetts—are based on performance in the seventh and eighth grade, attendance in the seventh and eighth grade, and, if a child has not indicated a level of entry to sustain his activity in the vocational school, he is denied admission.

Now, it is done much more subtly than that, but that is what it boiled down to in a lot of schools, that there was really discrimination on the front end and they were trying to build in a success factor again on the grounds that we have every right to be judged successful, and the only way we can control that is to get rid of the bad actors, so there is a whole group of people that talk about dealing with the dropout issue. Well, I would question some of the statistics on that because I think the whole range of people are not getting into those programs to make a valid judgment.

Now, I was glad to see you come back, Mr. Miller, because you raised a question, I think, with the first panel on dealing with pupil-teacher ratios and whether or not schools had vacancies or positions that they could offer to males or other groups that are denied access.

That is offered by most schools as the reason why they can't move faster. I think it is a false argument. There are many options open to the way schools are run. Pupil-teacher ratios are largely determined at the local level. There are State guidelines, but we are doing now a cost study in Massachusetts of seven schools, four regional vocational schools, two schools that are parts of comprehensive high schools, two traditionally trade schools in Massachusetts, which are a little different, and the student-teacher or the pupil-teacher ratio mix is quite different.

In going around to five other States, which I did for a commission that Governor Sargent set up before he was not reelected, I went out to five other States—California, Michigan, Pennsylvania, South Carolina, and New Jersey—to look at the way the schools were set up, the way the programs were run.

There is a tremendous variation and there are tremendous options open to communities in dealing with increasing enrollments, such as extended day, 2-year programs, skill center approach, and I have been trying to sell this to our State, and now they are at the level of at least talking about it at the board of education level.

Now, a lot of people say: "You are going to affect the quality," but the placement records in these States vary very little. They all claim quality programs.

The reaction to this within industry is pretty much consistent. They are saying they are focusing too much on skills and not enough on decisionmaking and basic communication skills that have to do with getting along with your fellow worker.

I think I will restate that education, whether you are talking about elementary, secondary, post-secondary, is much too concerned with bricks and mortar. That is, they are concerned with carrying out a class in a classroom, or, if I may use the expression, a hearing in a hearing room, and that is not the way the real world is.

You have got to—I know that how you build in education programs in communities and community resources is something that people have talked about for 10 years, but I think the era of school building really has passed. It should have.

There is too much in the way of wasted facilities in Massachusetts. In my hometown, there are two older school buildings. If you are going to build education facilities, make sure they are multipurpose, that they can be used by community groups in a programmed way.

We ought to be encouraging—I suggested to Mayor White 3 or 4 months ago when he started announcing a series of industrial parks that that is your best opportunity, to put in vocational education. As you negotiate with industry and business to build industrial parks, insure that they are willing to provide either the space of facilities for students coming in, because I think the student who works in a dealership, who gets his educational program at a Sears Roebuck or any other store, is going to get built info that program a better understanding of what the working world is, what it means to work with grouches, what it means to work with customers coming in, much more effectively than we can do in the classroom.

I see that type of movement as a plus, and I have tried to encourage our State: "Don't keep putting into your State regulations that it has to be carried out in an approved facility," because that approved facility in Massachusetts really means a traditional classroom.

I think the positions—the numbers of lathes, the number of machines you have, is awfully hard to expand, and I don't see it as adding—if you expand enrollments 100 percent, adding 100 percent at no more cost.

This is part of the role that I see State advisory councils taking, making communities aware of the options that they have. There is no one good way—well, that is a bad example.

Mr. MILLER. I would like to ask the two students—Dr. Steiger in her report mentions that one of the major roadblocks to participation by women in vocational programs normally occupied by men is counselors and their attitudes.

She cites somewhere that only anecdotal material is available. I would like your impressions about what kind of roadblocks are applied by counselors in terms of seeking nontraditional courses.

Ms. FABIAN. We mentioned consciousness raising before, and I can tell you that that is definitely needed in the school system like Chelmsford because the guidance counselors have been there for a long time and they have certain set ideas on who can survive what in

certain areas. so the girls, if they show any lack of academic ability, are urged to go into something that they could easily conquer like vocational programs, and cooking, and sewing, and classes like that, and boys, if they have the same lack of ability or if they get in trouble in school, are urged the same way. It is too bad. Sometimes they don't really lack the ability, but because the guidance counselor believes that, then they believe it themselves. Guidance counselors do have a lot of control over the future of these kids, and it is too bad.

Ms. RIMFOTT. I would like to comment on that also. I think, as Mr. Parrott mentioned, one of the important times in a student's life happens in the eighth grade. That is when you are forced to make decisions, at least in my school, and at that time the students don't really know for sure what it is they want to do.

I mean, a girl is very unlikely to know for sure that she wants to go into carpentry or auto mechanics and is probably not going to make the effort to break out of the traditional mold of just going on into typing or something like that at that point.

I know that happened to a lot of girls who are in high school now, my classmates. They weren't sure then. They were just easily channeled by their counselors into typing or bookkeeping and those kinds of vocational courses that were offered in high school, and after their freshman year it was not what they wanted at all. They either wanted the total academic college prep courses, or they wanted the carpentry, or something like that, and at that time you are not allowed to break out of it. If you have already entered a freshman year into one vocational course, you cannot join another one.

That happened to a lot of female students, so I think a lot has to be done at the counseling level in junior high school level.

Second, at the high school level also. When I was preparing to come here, when I first found out last week that we would be coming down here, I went to the guidance office and asked, first of all, what would happen if a student came to them and said: "I think there has been a violation of Chapter 622 and I feel that I am discriminated against. What can I do?" They said: "Well, we don't have any information on 622. I am very sorry. There is nothing we can do." I said: "Well, gosh, that is funny, because I brought you some just a couple of weeks ago, I brought posters to the school to be put up on 622." They couldn't find any of the information that I brought them. Nobody knows what happened to it. They said they would not have any information for female students who came and complained to them.

I went to the principal of my school and I went to the head of the guidance—the guidance director and said that I was going to be testifying on sex discrimination in public schools, and did they think there was anything I should add.

They both said: "Absolutely not. There is no discrimination in our school." The principal said: "You show me where there is discrimination. There is no discrimination here." The head of guidance said: "No, I don't think there is anything I can add because there is no discrimination in this school. We are sorry."

The view was quite different as expressed by some of the female teachers and some of the female students and some of the male

students, but the guidance counsellors apparently do not see any discrimination. They are not prepared to cope with students who thought that they were being discriminated against.

Mr. MILLER. Thank you.

Mrs. CHISHOLM. Mr. Buchanan.

Mr. BUCHANAN. Thank you, Madam Chairperson. Mr. Parrott, you are a male who showed your intestinal fortitude by requesting home economics courses. I wonder what your view is as to whether or not we ought to continue Federal funding of home economics courses. I know we only provide a small portion of funding in the overall area of vocational education, but would you support eliminating our funding at the Federal level of home economics or would you not? I would be interested in the views of the rest of the panel.

Mr. PARROTT. It is a difficult question for me to answer. Nationally, I would say insofar as that category in Massachusetts is concerned, that it is not a very significant part. The State and the local communities put a lot more money into it. In terms of Massachusetts I would like to see that money spent in other areas. If it is being spent at all in consumer and homemaking. I think more might go into curriculum development or curriculum redesign to get at problems of sex bias.

With my children, if I may use a personal example, because of my own involvement in cooking and doing clothes and ironing and all that stuff—All four, two boys and two girls, have been exposed to this. They all cook one night a week. They all have their chores that are not divided along male/female lines. It is a part of a planned program to raise their level of consciousness.

Also I find, if you are alone and you can't cook, you have got a problem, whether you are male or female. I like to eat, so I cope with that.

I just think though in other States I know there are States that are not doing anything effectively in vocational education, that could not do it effectively without Federal funds. There are some States in which the Federal funds are almost 100 percent of what goes on.

Again, I think that is a little deceptive because a lot of States are doing things which are not reported separately. It depends on the State accounting system and whether or not they report on an occupational day basis or a normal academic day, so I don't think you really get a true picture of what is going on.

I think that if you—I see Federal funds applying to priorities and issues as they arise from the States in giving the States perhaps a little bit more discretion about how they cope with that issue and what program in the State.

That is sort of an evasive answer, but I hate to say it is of no use nationally because I simply don't know, but it would not, aside from some consumer groups who may say otherwise—I don't think it would affect Massachusetts programming if we did not get those particular funds, but it might affect curriculum development, curriculum design.

Mr. BUCHANAN. Would either of you have a comment on that question?

Ms. FABIAN. I realize it is sort of an administrative problem, but home economics is worthwhile, obviously. The only problem we have

is that it is not offered to everyone. It is only offered to people in a certain course. If you would be offering it as an elective or something and people could choose, then maybe more people would realize the value of it, but I am not sure there is anything you can do at this level. If it could be offered to more people, it would obviously benefit more.

Ms. RIDEOTT. I really don't feel qualified to comment on whether or not Federal funds should be continued in home economics, but I would say that, judging from what has happened in my school, there is a lot of student response when courses are opened up and a lot of kids feel the need for a course that will teach them what to do when they get out, how to fill out their tax forms, how to cook a meal, and I think that the males are especially concerned about that because they realize that when they get an apartment they are not going to have Mother to cook for them anymore and there is going to be a need for them to have some cooking knowledge.

Mr. BUCHANAN. Thank you very much. I do think it is going to be a relevant question of this committee this year because we have had indications there may be an effort to remove the funding for home economics—Madam Chairman, I would lean that way, but, on the basis of the thrust of the testimony, these are skills that are widely needed by males and females in this population, and some States are very heavily relying on Federal funding and I don't know what would happen if the over-all program—It appears that this is an area that needs some reform, but we are going to have to look at what effect it might have.

Mrs. CHISHOLM. I would certainly agree with you. I think the important thing that came out of all these hearings this morning is that we "raised the consciousness" of many of the members of the committee. We will also need to carefully assess all of our priorities in terms of our responsibilities as members of this subcommittee. Lastly, I would like to thank everyone for coming this morning and to say that we have certainly learned a great deal.

Now the hearings stand adjourned. Thank you very much.

[Whereupon, at 12:50 p.m., the hearing was adjourned.]

[Information submitted for inclusion in the record follows:]

PREPARED STATEMENT OF DR. DEBORAH P. WOLFE, ASSOCIATION LEGISLATIVE PROGRAM COMMITTEE CHAIRMAN, AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

The American Association of University Women with a membership of over 180,000 women organized in 1,776 branches in the fifty states, was founded almost a century ago for the purpose of providing women, college graduates with an opportunity to utilize their educational training.

As early as the 1900's AAUW members, acknowledging the direct link between vocational education and success and fulfillment in the work world, convened a Task Force to address the unique problems of vocational training for women. What they found to be true then is still true sixty years later. Women are tracked into a very limited number of acceptable occupations. The 1913 publication which followed the Association study pointed up the concentration of professional women in the field of elementary and secondary education. This holds true today. After close to a century of permitting sex-segregation in our occupational training and counseling programs, it is time that vocational education legislation address the problem.

In the 1920's, following the enactment of the first vocational education legislation, AAUW worked to get Home Economics, then the only conceivable "occupational" training for females, equal funding and equal status with trade

and industrial arts. Now in 1975 AAUW is asking Congress to review the facts concerning the vocational education system and place them beside those concerning men and women in the work force. It will become clear that we can no longer live with a vocational training system designed sixty years ago and no longer appropriate to today's world.

When the first vocational education legislation was enacted less than two-fifths of the women worked outside the home; home economics was a proper, if not limited, training for girls. But the traditional models of man as breadwinner and woman as homemaker are no longer appropriate or relevant. Forty-four percent of working age women now comprise over thirty-seven percent of the work force. Moreover, most women work, as do men, to support themselves and their families.

Of the working women sixty-seven percent are either the sole support of the family or are partners in families where the husband earns less than \$7,000 a year. These working women's salaries often determine the difference between a low or middle income for their families. Yet women are clustered in a very few occupational areas. They earn less basically because they are concentrated in too few jobs; supply exceeds demand and therefore pay is low. In 1973 the median annual salary of women who worked full-time year-round was \$6,335 while that of men was \$11,186. White women can expect to make only sixty percent of the salary of a man with the same amount of education. The percentage for a black woman or woman of Spanish origin is even lower. In fact, in any studies of occupation or income the minority woman is always the lowest of all wage earners.

Where do we look for the causes of this low productivity of women in the work force? Though the conditioning of boys and girls to a certain image of themselves and to certain defined horizons begins in the home and in early education, it is within vocational education programs that we find the direct link between the training of young people and a segregated occupational system.

The statistics demonstrate unequivocally that sex segregation in vocational education is a fact. Though, theoretically, boys and girls are presented with a wide range of possible occupational training programs, enrollments are predominantly of a single sex. Almost half of the various instructional categories have over ninety percent enrollment of one sex. Girls are concentrated in homemaking, office training and health programs while boys are predominantly in trade and industrial arts. Girls comprise ninety-four percent of the enrollment in secretarial courses but only fourteen percent of the enrollment in engineering and mechanics. Besides exclusion from non-traditional courses, girls are further discriminated against. They are concentrated in a far smaller number of occupational skills. Seventy-four percent of the total female enrollment is found in homemaking and office training courses which lead to female dominated areas of employment where earnings are sixty percent of men's. For a large percentage of female high school graduates their sole 'occupational' training is in the area of non-gainful home economics, in itself valuable, but not delivering a saleable skill. Moreover, girls are predominant within twenty-two instructional areas out of a possible 136 while boys are dominant in sixty-five. Boys have three times the course options as girls.

The fact that boys and girls are segregated and clustered in 'acceptable' occupational training suggests a failing within the vocational education and career counseling programs. Rather than perpetuating a dual occupational system, vocational education should be helping to eliminate such inequities by providing equal opportunity for training in all fields for both sexes, all races and ethnic groups.

Our entire educational system is failing to meet the needs of yet another sector of the population—those of Spanish origin and of limited English speaking ability. Those children and adults who come from environments where the dominant language is other than English are restricted in their attempts to profit from occupational training because of the language barrier. The high dropout rate of Spanish speaking Americans is reflected in the fact that the median annual income for a Spanish speaking family is \$3,000 below that of the population as a whole. Whereas the medium annual income for a white female (\$6,335) is half of that of her male counterpart (\$11,186) the medium income for the Spanish origin female is about \$4,600, almost \$2,000 lower. It is not possible to fully document the failings of our educational system to meet the needs of speakers of English as a second language because no provision

has been made as yet for the systematic collection of data on the basis of national origin.

The concept of bilingual education, which has been addressing the problems of these students, should be joined to vocational programs in order to provide the milieu where the bilingual student can receive occupational training on an equal basis with others and thus make his/her contribution in the marketplace.

It is questionable whether any significant steps could be taken to break out of the mold from within the vocational education structure where stereotypes of male-female roles abound. Though thirty-six percent of the women who get B.A.'s receive them in education, a paucity are trained in vocational education, industrial arts or educational administration. The educational hierarchy is a pyramid with women making up the base and very few or none at the top. The administrators and policy makers are predominantly male. For example, one out of ten school board members and one out of fifty school superintendents is a woman. This hierarchy is even more marked in the male-dominated area of vocational education where the women who do hold Ph.D's are almost exclusively in home economics and nursing education. On the State Advisory Councils on Vocational Education, which are supposed to represent all relevant interests in the state, women are less than fourteen percent of the membership.

The Vocational Amendments of 1968, though a step forward in improving the quality of vocational education, nowhere address the problem of sex-bias and sex segregation. Now, with the passage of Title IX of the Education Amendments of 1972, such discrimination on the basis of sex in admission to vocational schools and/or programs is clearly illegal. In the process of revising the vocational amendments there are several basic steps which the Congress can take to begin to address this problem.

1. *Statement of purpose.* It should be specifically stated that it is the purpose of the legislation to provide vocational education opportunities equally to all regardless of sex, race or national origin. AAUW cites as exemplary a bill sponsored by Senator Charles Percy to amend all educational legislation to include language prohibiting discrimination on the basis of sex. We also urge Congress to address the problem of the Spanish speaking person. Steps should be taken to make vocational education available equally to students of limited English speaking ability to enable such persons to make their maximum contribution to the nation's economy.

2. *Funds.* A certain percentage of the funds allocated in this Act should be earmarked to address the problems of sex-discrimination and to correct past injustices. A percentage of the funds should also be earmarked for the development of bilingual training programs.

3. *Texts and materials.* Career education materials provided for under this Act should be required to be free of sex-role stereotyping. There should be a provision for the development of bilingual texts.

4. *Integrated curriculum.* Vocational education curricula should reflect the dual role of both male and female as homemaker and wage earner. To this end, home economics should be integrated by sex and combined with industrial arts courses to provide both sexes with basic life training including nutrition, child care, home and auto maintenance and repair. In revamping home economics and trade courses special care should be taken to ensure that the jobs of female economics teachers not be jeopardized. Furthermore, both sexes should be actively recruited into non-traditional vocational courses. Models of successful attempts to integrate programs should be prepared by the appropriate government agency.

5. *Inservice training.* Teachers and career and guidance counselors should be given inservice workshops on sex-bias in vocational education. Teacher education should include awareness of sex role stereotyping. In addition, we should begin to develop teacher education for bilingual vocational education teachers.

6. *Data collection.* A system should be instituted for collection, analysis and publication of data on enrollment and staff in all vocational education programs according to sex, race, national origin. Without this information measurement of success in integration would be impossible.

7. *Accountability.* Recipients should submit frequent and detailed reports on the results of steps taken to correct sex-bias in their programs.

8. *Complaint procedure.* An adequate complaint procedure should be specifically developed for vocational education. We would like to emphasize that

Title IX, considering its past record, can not be relied on for providing that mechanism.

9. *Women administrators and policymakers.* Positive steps should be taken to give women equal representation on national, state and local policy-making boards and advisory councils. Women should be chosen who are knowledgeable in the area of sex-role stereotyping in vocational education. Women should also be actively recruited for positions in educational administration.

The AAUW appreciates this opportunity to submit to the Congress these suggestions on how we can begin to address the pervasive problem of sex-bias which undermines the occupational training of our young people. The legislation this body is writing could provide the impetus for vocational education to assume its necessary and crucial role in helping both boys and girls to find a flexible, less conventional definition of themselves in the home and in the labor market.

PREPARED STATEMENT OF MARY D. JANNEY, CO-DIRECTOR, WASHINGTON OPPORTUNITIES FOR WOMEN

It is a pleasure to be here with you today. I must say there have been several times in the last 24 hours, as I puzzled over train, bus and plane schedules, that I wondered whether I could get here from where I was! But I did, and I'm glad. I was a teacher once myself, and it is, I believe, the noblest of professions. In fact, I would probably still be in it but for a quirk of chronology. That was that my son, who attended the same school in which I taught, came into the ninth grade, where I was the home room teacher. We agreed that it wouldn't be such a hot idea for us both to be in the same classroom.

So, I took a year off, fully intending to return after he graduated. That was ten years ago! Loving teaching the way I did, I can assure you that the activities with which I became involved had to be enormously creative and exciting to keep me away from the classroom. They were (and are) and I have yet to go back to teaching.

Should I go back someday, I would scarcely recognize myself. For, in the intervening ten years, I have learned so much about the role of men and women in our society that *all* my attitudes about schools—their administration, their teachers, their counsellors, their students, and the curriculum—have undergone a vast upheaval. I think differently, I believe differently, and I would believe differently in the school setting.

In the education of our girls and the message we seem to be sending about the relative worth of boys and girls, we are saying boys are better than girls, that they deserve better, that they come first. It is a message deeply ingrained in our society, and it is our responsibility to root it out.

My concern arises because of my work with an organization called Washington Opportunities for Women, of which I am one of the founders.

WOW, as it is more familiarly known, was formally founded in 1966. A group of women, who were married, middle-class women in their early forties, with growing or grown children, began to talk about the rest of their lives. I joined these discussions in my year off from teaching and, whereas I had not been out of the work force as long as some of them, I was one of them in all other respects. Most of us were college-educated. Most of us had been in the work force in the years before we married and had children. After years of being identified in terms of other people—that is, somebody's wife or somebody's mother—we were beginning to question who we were as individuals. Just as importantly, we were feeling economic pressures. College tuitions were staring us in the face, as were rising prices in the supermarket and department stores. Some of our husbands were talking early retirement. Those of us who were divorced or widowed brought a special urgency to our discussions.

We knew that we lacked information about where job opportunities might be, if that was the route we chose to go, and since there seemed to be no agency—no place where we could go to get the kind of information and support we needed to "sort ourselves out" so to speak, and assist us with our problems relating to the job market—we decided to create one for ourselves and the women who would follow us. We started small, with space provided by the public Employment Service, and no money. Today we have a budget of over half a million dollars; a paid staff of 25; a regular core of volunteers in our

Washington Information Center for women on work and training opportunities; similar, women's employment information centers in six other cities on the East Coast, programs designed for specialized groups within the female work force, such as women ex-offenders, welfare mothers, female heads of households, high school girls, a bi-monthly magazine; a proven expertise on women and employment which we are called upon to provide to schools, colleges, corporate employers, community groups and manpower agencies all over the country.

How did we get there from where we were and why is our experience important?

It's important because I believe we have a responsibility to heighten the awareness of students—particularly girl students—of what life will be like when their formal education has been completed. At no educational level, be it kindergarten, primary grades, junior high, senior high, college or graduate school, is there a conscious, systematic effort to inform and sensitize girls and young women to the pattern of their lives. When they hit the job market—and nine out of ten girls and young women *will* work at some time during their lives, so say the statistics—they have no idea of what they are up against. Most of them don't even know that they don't know.

The average young woman has been deluded into believing that if she is a normal American girl she will be in the paid labor force only for a little while, marking time until she marries and solves life's problems by becoming a full-time wife and mother, and that wholesome girls starting out in life do not plan seriously for extended paid employment *any more than they plan for divorce*.

She has been shielded from the cold statistics of life: that even if she does marry, she is likely to work outside the home for, at best, 20 years, that more than one marriage in four ends in divorce, that one household in ten is headed by a woman.

The term "career woman" used to be applied only to that woman who chose work over marriage. Today every woman is a potential career woman. The significant thing about women workers today (and they make up 40% of the total work force) is not only that there are so many of them, but that the majority of them are married. Women no longer work until they catch a husband, and then stay home for the rest of their lives. Typically, they work for a few years before the children are born. They have fewer children than women of an earlier generation, and their child bearing is over by the time they are thirty. They re-enter the work force by the age of 35 and continue to work until retirement. If a young woman is going to work for twenty or more years, first of all she needs to know this, and second, she needs help in planning for a productive career, not simply settling for one temporary dead-end job after another.

Statistics, moreover, show that the more education a woman has, the greater the likelihood she will seek employment. Nearly 7 out of 10 women between the ages of 35 and 54, with four or more years of college, are in the labor force today. The vast majority of them are there because they have to be.

If it is true, then, that girls will be working, where will they be in the work force if things go on as they have? At the bottom of the heap, I'm afraid. Women are clustered in a few low-paying occupations and professions. A third of all employed women are clerical workers, and the vast majority of all college-educated women—and I am assuming that most of your graduates, have their sights set on college—are clustered in six fields. Elementary and secondary school teaching account for almost half of them. Nursing, social work, library work, home economics, medical laboratory workers complete the list.

As a result of women being wedged in disproportionate numbers into only a few occupations and professions—and the lower-paying ones, at that—their earnings are low. Their earnings are only 58% of those of men. Women graduates from college in 1970, in a sampling of six fields, were offered starting salaries from 3% to 30% lower than those offered men in the same field. And the blockbuster of a statistic that always shocks me is that 96% of all the jobs that command a salary of \$15,000 or more are held by white men. Women and other minorities divide up the remaining 4% of jobs in that salary range. And that's not quite the end of where women are in the work force, and will continue to be unless we do something about it. The fact is that there will not,

be enough jobs in the so-called "women's professions" for the record-breaking number of women expected to look for work in the decades to come. The reason is that the teacher shortage of some years ago has turned into a surplus. The chief professional employment of women—the schools—do not need her any more, at least in the numbers they once did, and there will not be enough opportunity in the other so-called "women's professions" to absorb the overflow from teaching. On the other hand, the list of professions outside the accustomed women sphere that offer growing opportunity is long. Among them are medicine, dentistry, law, architecture, business, accounting science, environmental protection, life services to mention some. These will be careers—good careers—in these fields (recession economy excepted) in the '70's and '80's. The question is whether women will break out of the accustomed women's fields and claim a fair share of opportunities in some unaccustomed ones.

The number of women in these fields in the United States today is pitifully small. Only seven percent of our doctors are women three percent of our lawyers, one percent of our engineers, two percent of our dentists, ten percent of our chemists. European and Far Eastern women do far better than we when it comes to representation in the professions.

If I were to go back to teaching tomorrow, I would have a very different agenda, knowing what I know now about what life is like for women in our society. High on my agenda would be to rack my brain to devise ways to heighten the awareness of my girl students of the necessity of planning for a lifetime of employment in a career with a future, without compromising the paramount importance of a liberal arts education. I am not talking about narrow vocational courses diluting or taking the place of timehonored curricula. I am talking about expanding the framework within which these courses are taught and, most importantly, upending the overall message that the school is sending about their girl students and their boy students. I could begin almost anywhere.

What about the choice of textbooks for courses and for your libraries? Sex stereotyping begins early in school books and persists right up the line. Pre-school picture books and primers being used in most of our schools are essentially sexist, and are sending the message that boys are the doers, girls the watchers. Studies show that in early grade readers, the oldest child in a family is almost *always* a boy. Boys are associated with making, earning, planning active games, learning. Girls are associated with helping mothers or brothers, playing with kittens, getting into minor forms of trouble and being helped out of it by their brothers. Story lines for boys' primers often go as follows: boy sets up carnival act, boy teaches dog to jump for food. Boy builds care, girl interferes. All too often, story lines for girls go: girl is frightened by older brother, girl is helped by older boy, girl goes shopping with mother. Patterns of passivity, dependence and domesticity of girls runs through most early school age books. It is encouraging to know that, in an effort to undo the myth that girls and women can do little for themselves, a women's group has published an annotated bibliography on non-sexist children's literature, called "Little Miss Muffet Fights Back." And there are other annotated bibliographies for older students which include books where women play important, active roles. Even in my pre-aware state, when I was teaching 8th and 9th grade American history, I used to wonder vaguely what women were doing as our nation was developing. If I went back to teaching now I am sure I could find books which would give a more rounded picture of women's role in history.

What about counselling that goes on in schools to prepare girls for what life will be like?

First of all, counsellors need to know the facts about women in the work force and counsel "up" rather than "down". I heard of a high school physics teacher who said only 24% of his students are girls but that 50% of his A's went to girls. He asked them one day why so few girls take physics and was told that the guidance counsellor encouraged only the "best" girls to go on in science. That kind of guidance explains why there are only 280 women Ph.D.'s in physics in the entire United States today.

It is know that 40% of the people in this country who show an aptitude for engineering in tests are women, but only 1% of our engineers are women. Women are not engineers because too often counsellors, when faced with high engineering aptitude in a girl will say something like: "I know you don't want

to be an engineer." Most 15- and 10-year-old girls are conditioned to nod in agreement.

In all the occupations and professions in the country—over 250 of them—there isn't one in which there isn't at least one woman. The problem is that there have been so few women in other than the traditional fields, and therefore it is difficult to bring these potential role models to young girls' attention.

From the time they are born, boys are *expected* to do something creative and energetic; there are fewer expectations for girls. At Holton Arms School, in the Washington area, recently, they had a very successful day when women role models from a wide variety of professions came and talked with the girls about their work. One girl said after it was over: "I have always wanted to be a doctor, but my grandfather kept telling me I couldn't do it. I was beginning to think I couldn't, but tonight I am going to write to him and tell him I will be a doctor."

At WOW we are conducting a very exciting experimental program with high school girls, called Careers for Peers. With funding from three foundations, we are working with high school girls in two schools to help them understand what their lives will be like. Just telling the girls the pattern of their lives and that actuarial tables predict they will live to be 75 is an eye-opener. As one 15-year-old in the program said: "I have more time than I thought. I have sixty years!"

After a discussion of their probable life pattern, we expose them to the economic facts of life and a great wealth of career information and career resources. We try to send the message that *all* professional avenues are theoretically open to them—that they need to think of themselves as human beings first, with certain talents and interests, and not to think in terms of "I can't do this or I can't do that because I am a girl." Then we work with them to set up career centers in their schools—places which they staff and where their peers can come for career information, career resources, career programs—anything the girls decide will capture the interest of their peers and spread the word.

This peer concept grew from our own experience in our Information Center on work and training opportunities for women in Washington. There, trained volunteer peer counsellors, women who themselves are getting ready to enter the job market, talk to women who come to us to try to find a job or plan a career. There is an immediacy and a rapport between the volunteer peer counsellor and the woman she is trying to help, and this peer relationship is one of the things which we are testing with the girls at the high school level. We are also in the process of developing training materials and a peer counselling handbook and soon will be in a position to offer technical assistance to any school or school system interested in undertaking a similar program.

The program is gripping and the returns aren't in yet, by any means. People, and particularly young people, don't like to plan for the future. They feel they are trapping themselves. Yet, we see so many women in our Information Center who say, "If only I'd known what life would be like," and "How I wish I had planned earlier," as they approach the job market out of need and feel ill-equipped and unconfident. We must get across the idea to young women that *not* to plan is the real trap.

Girls are so conditioned from day one to play the passive, please-the-boys role that they persist in believing that they will marry and live happily ever after. Many is the mother, including my own, who says—and in my case, used to say: "Don't act so smart. You won't get any dates."

So—we're beginning to think about enlisting boys in the program, too, and making it a coed venture. Even though society's options for boys are broad, they could do with some career planning, too, perhaps together, boys and girls could be helped to understand what life will be like.

Summer jobs for students may provide an opportunity for girls to break out of the accustomed mold and "try on" a non-traditional activity. There was a story in the paper recently about a young woman in California who, having passed the rigorous physical examination and life-saving tests, became the first female life guard one summer on a California beach. Apparently surfers practiced drowning for a while until the novelty of her presence wore off!

And *volunteer* summer jobs are a great chance for students to test and "try on" interests for what will be a lifetime of work. I know most kids, when they are old enough to earn money in the job market, are only interested in paid summer jobs. But for those who can afford it, a volunteer job chosen with

care, with a view to getting the "feel" for a particular profession, can be invaluable. I wish I could use a girl for this example, but I happen to have two sons. When our older boy was 15, we bludgeoned him into taking a volunteer summer job in a school for emotionally disturbed children. Naturally, he wanted to pump gas for \$1.55 an hour. We prevailed, however, and he went back to the school the next summer as a paid junior staff assistant and now has his master's in special education and is teaching in Boston. His experience is not unique.

The upcoming generation of workers will have a very different attitude toward the role that work plays in their life than those of us in this generation. Young people today are not clinging to the work ethic with the same tenacity that we do. Rather, they want more control over their lives and will fit work into their total lifestyle rather than viewing it as the core of their existence around which all other activities are fitted in, if possible. This may well result in young men in their 20's, 30's and 40's wanting careers that will permit them to assume more responsibilities for child-rearing and home care.

If they know the facts, boys may well want to encourage their girl classmates to "act smart" and consider non-traditional fields of work. Boys can be consoled by the fact that the girl he is encouraging to prepare herself for law, medicine, engineering, or some other high-status profession may be his wife. The majority of families in America today are already planning their lifestyle on the basis of two incomes, and this promises to be increasingly true. Our job is to free boys, and particularly girls, from sex-stereotyped roles in the job market, and indeed in all phases of life, and help produce a generation of liberated women and liberated men.

NATIONAL WOMEN'S POLITICAL CAUCUS,  
Washington, D.C., May 7, 1975.

HON. SHIRLEY CHISHOLM,  
House Office Building,  
Washington, D.C.

DEAR CONGRESSWOMAN CHISHOLM, I am enclosing the statement of the National Women's Political Caucus concerning some principles we would like to see embodied in legislation renewing and revising Vocational Education, especially as that legislation affects women.

I hope you will submit our statement to the sub-committee on Education of the House Committee on Education and Labor where you have recently chaired special hearings on sex discrimination in Vocational Education. This statement was prepared with the intention of testifying at those hearings.

We make four recommendations in the body of our paper.

1. Add a clear statement of purpose that mentions the special needs of women.
2. Improve the data collection system for the express purpose of evaluating progress towards the elimination of sex discrimination.
3. Mandate greater participation of women in policy making.
4. Restore bilingual programs to enable Spanish-speaking women to utilize vocational education opportunities.

You are to be commended for your efforts on behalf of women and for the dignity and competence with which you presided over the special hearings.

Thank you for your assistance with our statement.

Sincerely,

BARBARA G. NNOKA FOR FREDRICA WECHSLER,  
Political Action Coordinator.

A POSITION PAPER: PRINCIPLES TO BE CONSIDERED IN DRAFTING VOCATIONAL  
EDUCATION LEGISLATION

(One of a series of position papers issued by the National Women's  
Political Caucus)

The National Women's Political Caucus, consisting of 30,000 members organized in almost every state, in accord with its mandate to work for legislation that "recognize(s) the special needs and interests of traditionally excluded groups," submits the following statement on the legislation before this committee concerning the interests of women in Vocational Education.

Access to better paying employment opportunities is a special need for women in the United States in 1975, and will be for at least the rest of this century. Women today attend and complete high school, and after graduation more than 2/5 of the women in the country work. Younger than working women used to be, they will work more years. Today about half the working 2/5 of our women have children under 18. In five years, according to statistical projections, about half the women in the country over age 25 will be high school graduates. Unless a directed and forceful effort is made to change job training and employment patterns, these women, after 10 years of work, will have earned only 75% of the total earnings of their male counterparts of the same age and same level of education.

The factors which determine that all women will earn less than men operate from early childhood and become very obvious as early as age 13 or 14 when adolescents choose courses for high school. Far too many young women decide to prepare for jobs in fields that are already over-populated by women and that carry lower pay rates—food service, clerical, elementary school teaching and retail sales. Projected statistics on the job market through 1985, compiled by the U.S. Department of Labor, Bureau of Labor Statistics, and published in the winter issue (1975) of the Occupational Outlook Quarterly are attached as an Appendix.

On what basis does the very young woman, in the school guidance office, make such choices? She looks at the bulletin boards, the leaflets on the guidance counselor's table, the pamphlets in the files, and she talks with the counselor. She hardly ever sees photos of women truck drivers, carpenters, masons or maintenance engineers. She almost always sees photos and posters depicting women in beauty care, nursing, in glamorous offices and in classrooms filled with little happy children.

Our hypothetical young woman will of course discuss her job preference with her family. Dr. Marilyn Steele, who testified before the subcommittee on Education of the House Committee on Education and Labor on March 17, 1975, cited a Louisiana State University study that confirmed "that parents are the decisive influence" in determining occupational choice. Families of teenage adolescent females will talk about the women they know who are teachers, nurses, or office workers. Males in the family—father, brother, boy friend—may very well snicker at the young woman in the hard hat who now flags traffic at the local construction site.

Even if the school counselor shows our young woman the projected growth rates for sales workers, operatives, non-farm laborers and private household workers—all due to slow down drastically—our 14 year old is not going to be easily persuaded to select a career goal different from the traditional female careers. Consider the testimony of Dr. Jack Kaufman before the Education sub-Committee on April 21, 1975. He and his team occasionally found records of enrollment of up to six young women in non-traditional male-intensive high school courses. But by the time his team has reached the school, those enrolled young women had dropped the course. They changed their minds and returned to traditional and acceptable school work. All the reasons for the dropouts are not yet identified. But it appears necessary for the school administration at the local level to support and sustain individuals involved in innovative programs.

We must address ourselves to two imperatives when dealing with discrimination in vocational education and career planning for women. The first imperative is insuring female access to presently male intensive fields. The other is to foster attitudinal changes in society which will promote steady progress towards the elimination of such discrimination.

On insuring access: A bare beginning was made with the enactment of Title IX of the Educational Amendments of 1972. That tool should be used. Access to vocational training should not fall between other controversies—such as access to athletic programs—and be lost. Title IV of the Civil Rights Act of 1964 is also available and should be used. To ignore Title IX is to perpetuate the situation. Employment opportunities for qualified women will never be available in some fields until more qualified women present themselves for employment in those fields. Concerning this the National Women's Political Caucus can speak from its own experience in the political realm. As more women have entered politics, more women have succeeded in that arena. We therefore are asking that in the amendments to the Vocational Education Act, now under review, incentives be designed that encourage state and local education authorities to measure success not only in terms of the percentage of students successfully

placed, but in terms of increased female enrollment in formerly male intensive vocational programs.

We sympathize with the Director of a local vocational technical high school or community college who is called to account by his local board for successful job placements at the end of each course of study. But that same Director can be asked to account to the State on the basis of other criteria. He can be asked to show progress towards more equal distribution between the sexes in Health Programs (1972: 84% female, 15% male); in Technical Programs (1972: 10% female, 90% male), and in Trades and Industrial programs (12% female, 88% male).

Although all women are afflicted by the conditions we have described, we wish to call particular attention to the situation of women of Spanish origin in the United States—Puerto Rican, Mexican, Cuban, and South American. The burden of this economic disadvantage appears to fall especially heavily on them. 1974 statistics from the Women's Bureau of the U.S. Department of Labor indicate that while 2/5 of all Spanish women work—the same percentage as for all women—they enter the labor force with far less education. Spanish women 14 years and older had 9.7 (median) years of school. The comparable figure for white men and women was 12.3 years of school. As you might expect, women of Spanish origin accept harder work at less pay than other women earn. 15% of all women over 16 years are professional and technical workers; only 7% of Spanish women are in that group. 14% of all women are operatives, including transportation workers, but 30% of Spanish women work in that category. It is predictable therefore that the income level of Spanish persons and families will be low. 1973 figures from the Women's Bureau, Department of Labor, show that 56% of Spanish families headed by women plus single Spanish women were below the poverty-level category then in use.

To correct the inequities we have discussed, we suggest four actions as possible and useful.

1. Include in the revisions a clear statement of purpose. "to provide vocational education opportunities to both sexes equally."

2. Instruct administrative agencies to record occupational course enrollments, school by school, in terms of race, sex, and national origin. Without this, there is no way to measure progress.

3. Re-authorize and restore funding for bilingual programs of vocational education.

4. Add to the special groups listed in both Section 104(a)(1) and Section 104(b)(1) of the present act, language requiring the appointment of "persons familiar with the vocational preparation needs of women and the problems of sex bias in employment and training." The fourth suggestion would increase the percentage of women in policy positions on State and National Boards of Vocational Education which in 1974 was 15.3% at the State level.

In respect to the second aspect of your work on this legislation, namely, promoting attitudinal changes in society to assure steady progress towards the elimination of discrimination based on sex, we urge you not to become faint-hearted. We realize the federally funded program you are considering is administered at the local and state levels by bodies which, in fact, become active agents, and we do not underestimate the difficulty such a situation presents to the Congress.

However, for almost half a century, voters in this country have, by and large, accepted as legitimate concerns of their Congress, the establishment of societal goals and standards of acceptable behavior, and the encouragement of initiatives for changes to achieve these goals.

As federal participation in Vocational Education is under review, we urge you to take this opportunity to make clear your espousal of the societal goal of equality and to press forward to eliminate the perpetuation of sexism in our society.

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## SEX DISCRIMINATION AND SEX STEREOTYPING IN VOCATIONAL EDUCATION

MONDAY, APRIL 21, 1975

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ELEMENTARY, SECONDARY,  
AND VOCATIONAL EDUCATION  
OF THE COMMITTEE ON EDUCATION AND LABOR,  
Washington, D.C.

The subcommittee met at 9:55 a.m., pursuant to call, in room 2175, Rayburn House Office Building, Hon. Paul Simon and Hon. Shirley Chisholm (presiding).

Members present: Representatives Mink, Chisholm, Lehman, Blouin, Simon, Miller, Mottl, Quie, Buchanan, and Jeffords.

Staff members present: Jack Jennings, counsel for the majority; Charles Radcliffe, counsel for the minority; and Yvonne Franklin, minority legislative associate.

Mr. Simon. The subcommittee on Elementary, Secondary, and Vocational Education will come to order. The hearing is being conducted today on sex discrimination and sex stereotyping in vocational education.

We held 1 day of hearings last month on this subject. This has been suggested by Congresswoman Chisholm. I was here for the subcommittee hearings that day, hearings that I think were very fruitful.

There are a number of conflicts, I might explain to those of you who are here, of members working on problems from school lunches to Vietnam right now, so there will be kind of a going in and out. I extend our apologies for that.

Our first witness is Dr. Jacob Kaufman, if you can identify yourself first. I note that your statement is a somewhat lengthy one. Can you summarize that to some extent? Without objection your prepared statement will be inserted in the record.

Dr. Kaufman, I will recognize you at this point.

[Statement referred to follows:]

PREPARED STATEMENT OF JACOB J. KAUFMAN, DIRECTOR, INSTITUTE FOR RESEARCH ON HUMAN RESOURCES AND PROFESSOR OF ECONOMICS, PENNSYLVANIA STATE UNIVERSITY

It may appear presumptuous for a professor of economics, and a male at that, to be invited to testify before this Subcommittee on "sex discrimination and sex stereotyping in vocational education" as requested by the Honorable Carl D. Perkins, Chairman of the Committee on Education and Labor, in his letter of March 6, 1975. Let me present certain credentials.

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For the past ten years the Institute for Research on Human Resources has engaged in research in a variety of areas. We have studied and experimented in programs involving corrections, health, pollution, science policy, manpower, and education. In education we have been involved in a program involving school dropouts, attempting to provide students with skill training or a general academic program in order to give them a "second chance." We have concluded an experimental program for young adults in a correctional institution. We were involved, more than ten years ago, in a study of vocational education in nine communities to determine the effect of this type of education on the employment of youth. We were asked to determine the cost-effectiveness of vocational education. I was involved in a study of vocational education for the Commonwealth of Massachusetts. We are at present conducting a cost-effectiveness study of work-experience programs in 30 school districts. And, at present, we are studying 11 school systems which allegedly, and I stress the word allegedly, are actively involved in the education of females in traditional male vocational education programs.

I want to stress several points before I speak specifically on the subject under discussion. First, I want to emphasize that vocational education, as a process of education, has the key to ending many of our problems in the entire field of education. But it hesitates to use this key. By saying this I want to underscore the point that I consider myself a constructive critic of vocational education. Second, I want to express my appreciation to the Bureau of Adult Vocational and Technical Education for providing support to us to conduct our current study, the subject which is under discussion today. Let me indicate what we proposed, and are doing, under this study. The study is designed to achieve the following objectives:

1. To identify vocational education programs in secondary schools which have succeeded in preparing female students for occupations which are traditionally considered as appropriate only for males.
2. To identify the curricular objectives of these programs and the techniques used to attract students, to provide occupational preparation, and to place graduates in appropriate jobs.
3. To follow up graduates and dropouts of these programs to determine the nature of their employment experiences.
4. To identify the factors in the schools and communities where nontraditional programs have been offered which appear to lead to the acceptance of such programs.
5. To attempt to identify developmental or situational influences which differentiate female students who select nontraditional programs.

Why in our judgment was there a need for such a study?

#### THE NEED FOR THE STUDY

Some studies have revealed that women have broken the sex barrier in employment. However, they have mainly been concerned with occupations which require educational preparation beyond the secondary level. For example, women doctors, engineers, and women in academe have been the subject of numerous studies. (See, for example, Williams, 1971; Parrish, 1971; and Bernard, 1964.) Statistics indicate that the labor force participation rate of females who have completed four years of college generally is greater than for those lacking a college education, and the trend is toward increased educational attainment for women. Nevertheless, the vast majority of women do not complete four or more years of college. In 1968, only eight percent of the women population and 11 percent of women in the labor force had completed four years of college (U.S. Department of Labor, 1969).

Sex discrimination in the labor market has been investigated extensively. One of the most popular approaches to studying the problem has been to study differences between men's and women's earnings. Based on data collected during the 1970 census, the U.S. Department of Labor (1971) has released the following gross indicators:

1. For women who worked at full time jobs the year round in 1970, their median earnings were \$5,323 compared with \$8,968 for that of similarly employed men.
2. The earnings gap in 1970 varied with major occupation groups, being largest for sales workers where women's earnings were about 43 percent of men's earnings, and smallest for professional and technical workers where women's earnings were about 67 percent of men's earnings.

3. A distribution of workers by earnings levels indicates that in 1970.

12 percent of the women earned less than \$3,000 compared with five percent of the men

45 percent of the women earned less than 14 percent of the men, and

40 percent of the men had earnings of \$10,000 or more, compared with seven percent of the women.

It is acknowledged that the type of work and the level of job within an occupation for which an individual may qualify is often determined by educational background. The general tendency is to substitute amount of education, measured in terms of years of school completed, for educational background. The validity of this substitution is open to question. In fact, *amount of education* is not identical with *educational background*.

4. Nevertheless, when controlling for amount of education, it is seen that women's median incomes are less than men's, ranging from 55 percent for at least eight, but less than 12 years of school, to 63 percent for five or more years of college.

Attempts to interpret the earnings gap have been inconclusive with regard to the existence, importance, or cause of wage discrimination. The U.S. Department of Labor is cautious to point out that the indicators cited above should not be interpreted as conclusive evidence that women are receiving unequal pay for equal work (which is forbidden by federal legislation) but rather that they indicate that women are more likely than men to be employed in low-skilled, low paying jobs.

It has also been suggested that (1) consumer discrimination and co-worker discrimination might be more important than employer discrimination (Sanborn, 1964); (2) socially defined roles are the primary determinants which affect those factors which influence earnings (Fuchs, 1971); (3) variables such as length-of-service wage adjustments and job descriptions exert an effect on differences in earnings between sexes, the exact extent of which is not known (Buckley, 1971). It is highly probable that all of these factors exert an influence on differences in earnings.

Alternatively, Kreps (1971) concluded that women are overeducated for most of the jobs they do, and experience gained in implementing the Equal Pay Act indicates some discriminatory wage practices do exist.

What are the low-skilled, low paying occupations in which working women are concentrated? In 1973 the occupational distribution pattern was as follows:

Clerical workers accounted for 53 percent of all working women, compared with seven percent of men

Service workers outside the home accounted for 17 percent of women, compared with less than one percent of men

Professional and technical workers accounted for 14 percent of women, compared with 14 percent of men—however, the women were employed mostly in non-college teaching and nursing and other health-related positions

Operatives accounted for 13 percent of women, compared with 19 percent of men

At the other end of the spectrum were

Craftsmen, foremen, and kindred workers accounted for less than one percent of women, compared with 21 percent of men, and

Managers and administrators accounted for five percent of women and 13 percent of men.

Furthermore, of the total employed as clerical workers, 74 percent are women, of the total employed as managers and administrators, 17 percent are women; and of the total employed as craftsmen, 14 percent are women. It is those occupation groups having the largest concentration of women workers which have the lowest earnings. Even in those occupation groups having more women than men or equal numbers, men's earnings are generally greater than women's. However, such figures do not show the extent of which there may be job segregation by sex within occupation groups.

The patterns exist, but why? And, what are the implications of such patterns? Hedges (1970) offers the following explanations:

1. Evolution—most women's jobs are an extension of the work done in the home.

2. Job requirements—such as heavy lifting and carrying may be beyond the capability of most women, or in other cases job requirements may require longer periods of preparation than many women are willing to undertake.

3. Discrimination and widely held prejudices—on the part of employers, consumers, and co-workers, i.e., sex stereotyping of jobs.

Gubbels (1970) explains the existence of the patterns in terms of barriers to interchangeability of labor between men and women. He identifies the following barriers:

1. Of foremost importance is the lack of vocational training among women.
2. Physical barriers such as muscular strength—although with technical advancement muscular strength diminishes in importance.
3. Legal barriers—legislation designed to protect and safeguard women workers.
4. Technical barriers—specifically machine and tool design.
5. Cultural and technical barriers—including habit and prejudices as well as sex stereotyping of jobs.
6. Sociological barriers—i.e., social habits and behavior revealed in co-worker discrimination and self-concepts of females.
7. Family obstacles such as geographic constraints.

Sear identifies two reasons for the concentration of women workers in low-skilled, low paying jobs:

1. The customs and prejudices of man-made and man-controlled world, and
2. Women lack the education and training necessary for higher level work.

Lewis (1965) discusses the following interrelated factors as being barriers to employment of women:

1. Tradition—i.e., the role women are expected to play.
2. Attitudes—stemming in part from tradition which serves as the basis for many of the current attitudes concerning the employment of women. He differentiates between indirect attitudes which serve to make the working women the subject of emotional attack, and direct attitudes (employer attitudes) which may preclude the hiring of women.
3. Sex differences—for the most part the argument that abilities differ by sex is not supported by evidence.
4. Labor costs—may serve as a deterrent to hiring women, especially where the ratio of training costs to anticipated length in service (or turnover rate) is high.
5. Income inequities—in part the employment of women in lower-level jobs may arise from their lack of job seniority and work experience.
6. Lack of motivation to work or advance on the part of females.

Bergman (1971) maintains that so long as the range of occupations available to women is limited, their wages will be lower.

What then must be done to increase the range of occupations available to women? Obviously the traditions, attitudes, biases, and discrimination, cited as contributing to or reinforcing limited job opportunities, must be overcome. One way of overcoming these restraints may be through expanded educational opportunities. Women must be encouraged to pursue courses of study which have been considered traditionally male. In our project we are attempting to identify programs where this has been done and to study the elements in these programs, as well as in their schools and communities, that have led to their acceptance.

#### WHAT HAS BEEN HAPPENING IN VOCATIONAL EDUCATION?

In the year 1972 we find the following distribution of females and males in vocational education:

[In percent]

	Female	Male
Agriculture.....	5.4	94.6
Distribution.....	45.3	54.7
Health.....	84.7	15.3
Home economics.....	91.6	8.4
Office.....	76.4	23.6
Technical.....	9.8	90.2
Trade and industry.....	11.7	88.3
Special programs.....	44.7	55.3

Without examining in detail these data it is correct to assert that within these categories we find female enrollments much higher than male enrollments along traditional sex discrimination levels.

## WHAT ARE THE PROCEDURES THAT WE ARE FOLLOWING?

*Research Design*

Although the primary focus of the proposed study is on nontraditional programs for female students, the research strategy we are following is to compare traditional and nontraditional programs for both males and females. The design is thus a two by two matrix as illustrated in figure 1:

	Females	Males
Traditional	Females in Traditional Programs	Males in Traditional Programs
Non-Traditional	Females in Nontraditional Programs	Males in Nontraditional Programs

Figure 1. Schematic Design of Proposed Research Strategy

The students, both males and females, from traditional programs would form comparison groups against which the characteristics, attitudes and experiences of students from the nontraditional programs would be compared. Of all the groups, males in nontraditional programs, such as beauty culture or practical nursing, will probably have the smallest number of subjects. Nevertheless, this group balances the design and, to the degree such subjects are available, they should yield additional information as to what is necessary to attract students into nontraditional programs.

The major focus, however, would be on identifying about 10 schools which are conducting nontraditional programs for female students. The steps that would be followed to identify such programs are described below. When such schools are located, the cooperation of the school districts offering them would be requested. Once such cooperation is secured, the characteristics of students presently in the nontraditional programs and students who had taken them in previous years are being determined. Present and former students from traditional programs are being matched to the students from the nontraditional programs. The criteria used for matching, besides sex, would be partially dependent upon the records maintained by the separate schools. Where possible, color, school grades, IQ or achievement test scores, and occupations of parents would be used as matching variables.

Data are being collected from present students in their schools and from former students by mail questionnaires and personal interviews. Interviews are also being conducted with school administrators, school board members, teachers, counselors, students, and employers. Each nontraditional program is being visited for observation and evaluation by a team of recognized experts in vocational education. The procedures that would be followed in all of these data collection activities are explained in greater detail below.

## HOW HAVE WE IDENTIFIED EACH PROGRAM?

Several approaches were followed to locate nontraditional programs for female students. The Research Coordinating Unit in each state was contacted and asked to provide information on all exemplary and demonstration programs being conducted in each state. The various ERIC indices for the past five years were reviewed to determine if any of the published research refers to nontraditional programs for females. The research and statistics office of the Department of Education in each state was asked to provide a copy of their most

recent annual report on enrollment in vocational education programs. These were examined to see if any deviations from the typical patterns of enrollment by sex occur. If, for example, some states were found which have unusually high female enrollments in trade and industrial programs, vocational education officials in the state were contacted to find out where these programs were being offered.

Once a list of potential programs was compiled, it was reviewed by a panel which also serves as an advisory board to the project staff. This panel consists of at least three acknowledged leaders in vocational education, two of whom are women. The members of this panel, together with project staff, selected programs that appeared appropriate for study on the following criteria.

1. The degree to which the occupational area is judged nontraditional for females.
2. The occupational area should not require physical performance beyond the capability of most females, e.g., heavy lifting or carrying.
3. The extent to which the occupational area is anticipated to have high demand for workers in the future.

When we identified an adequate number of programs that met these three primary criteria, the following additional criteria were also considered:

1. Preference was given to programs which have been in existence for longer (for example, five years or more) as opposed to shorter periods of time.
2. Preference was given to those schools having females in selected traditionally male programs and males in selected traditionally female programs.
3. Selections were made from comprehensive and vocational schools.
4. Selections are from urban and rural schools.
5. Selections are from varying sizes of schools, as measured by total enrollment.

After all programs which meet the proposed criteria were selected, they were ranked in terms of overall suitability to the study. The school districts offering the highest ranking ten programs were contacted and their cooperation requested. If any declined to participate, contacts were made with districts which offer programs ranking lower until commitments are obtained from ten districts.

#### HOW ARE THE DATA BEING COLLECTED?

Instruments were developed to study the operations of the nontraditional programs as well as to follow up the experiences of graduates of these and traditional programs. The instruments used to study the operations of the programs are of three types: self-administered questionnaires, interview guides, and evaluation guides. The self-administered questionnaires are addressed to present students and their parents, teachers, and administrators of the nontraditional programs. The questionnaires directed to present students cover perception of parental attitude, attitudes of other students both in and out of the subject programs, and attitudes of school personnel. They are being asked to identify those influences which they feel were instrumental in their choice of study, points of encouragement or discouragement, problems they have encountered with the programs, school personnel, classmates, etc. In addition, dropouts from the nontraditional programs, both male and female, are receiving questionnaires covering the circumstances which led to their initial decision and the subsequent decision to change programs. Vocational interest inventories are either being administered as a part of the study, or results of such measures obtained from school records.

The parents of the students selected for study are also being asked to complete questionnaires designed to assess their attitudes toward vocational education and occupational roles, their child rearing practices, exposure to nontraditional sports, toys, etc., their socio-economic background, and their reaction toward the vocational choice of the student.

The questionnaires for teachers and administrators of nontraditional programs ask them to state the objectives of the programs, methods of recruitment of students, selection criteria, and the scope and sequence of instructional material, devices, and teaching methods. Administrators would also be asked to provide accounting data on the costs of the programs.

The questionnaire data from teachers and administration were collected and reviewed before the programs were visited by the study team. If the program objectives are not stated in behavioral terms, which permit assessment of the degree of attainment, the members of the study team interview the program

administration and teachers and attempt to lead them to restate the objectives in behavioral terms. The team members also use the interviews to clarify and amplify the other contents of the self-administered questionnaires.

Other school personnel are also being interviewed to try to determine whether their attitudes toward vocational education and toward occupational roles are encouraging, noncommittal, or discouraging to the breaking of sex stereotypes. The school personnel interviewed includes the superintendent, the principal, guidance personnel, academic teachers, and members of the school board.

At the time of the site visit the study team, of course, observes and evaluates physical facilities, staff qualifications, instructional program, guidance and placement methods, and attitudes and involvement of students. Standardized rating scales, similar to those used in other studies (e.g., Kaufman, *et al.*, 1967) are being used for these evaluations.

Mail questionnaires are being used to follow up former students. These questionnaires are designed, in part, to assess the extent to which the behavioral objectives of the programs are achieved. These are primarily the behavioral objectives that have direct relevance to performance in particular occupations. In addition to these occupationally specific assessments, the questionnaire also covers basic information on all jobs held since leaving schools. This information includes job description, months worked, hours of work, starting and leaving wages, ratings of job satisfaction, and ratings of high school preparation.

Two mailings of questionnaires would be made. Subjects who have not responded one month after the second mailing will be contacted by phone and their participation requested. Two weeks after the telephone reminder, attempts will be made to conduct personal interviews with a 20 percent sample of all subjects who have still not responded.

#### WHAT SHALL WE DO WITH THESE RESULTS?

The primary goal of the data analysis would be to isolate variables or factors that appear to be common to all the programs studied. It thus may be possible to derive some basic principles that must be followed if nontraditional programs are to be successful. To this end the various nontraditional programs, both for males and females, will be compared on such dimensions as objectives, curriculum, instructional methods, and characteristics and attitudes of students, teachers, and school officials. To the extent that these variables can be expressed quantitatively, the statistical techniques of factor analysis and cluster analysis will be used to determine if there are dimensions common to all the programs. For nonquantitative variables the techniques of content analysis will be used to identify common themes.

The follow-up data to be collected from former students would yield indices of the degree to which the programs achieve their ultimate objectives. The first step in the analysis would be to compare the results from the personal interviews of the nonrespondents to the mail questionnaires to the results obtained by mail. If consistent differences are found between the mail and personal interview results, the results that would be used in further analyses would be adjusted to reflect the best estimates of the actual employment experiences of all former students.

Comparisons would be made between students from traditional and nontraditional programs and among the students from the various nontraditional programs. The comparisons among the programs would attempt to determine if there are certain programs whose students have significantly better employment experiences. If such programs are identified, the operational characteristics of these programs would be examined in greater detail to isolate the features responsible for their greater success.

When the data analyses have been completed a preliminary report on the general findings will be prepared. In addition to this overall report, separate reports would be developed for each of the school districts which participate in the study. Both the preliminary report and the appropriate separate reports will be distributed to representatives of the school districts and they will be invited to participate in a feedback conference. At the conference the participants would be encouraged to comment on the preliminary report and make suggestions for additional analyses.

The final report would incorporate suggestions arising at the feedback conference. The focus of the final report would be on the basic principles that appear to be essential to conduct of nontraditional programs. The report would

specify these principles and the data and analyses on which they are based. At this point I want to stress that the following comments I am making are not necessarily based on our visits to approximately six schools out of the total of 11 we have scheduled. An important element in obtaining the cooperation of the schools is that the evaluation of each school will be confidential (although we shall send a separate confidential report to each school). The final report will not identify the schools. And I would respectfully request the Committee not to ask for the names of the school districts which we have visited or which we still plan to visit. Most importantly, the results are not as yet in. There are, however, several observations we can make which might be helpful to the Committee in considering further legislation.

The assertions made by some federal and state officials that there is now equal opportunity for females to enroll in traditional male vocational programs are incorrect. Such statements have been made to us but the data do not reveal that this is happening. In fact, even if the data from state offices suggest such enrollment, further investigation revealed an exaggeration for reasons which are obscure. Although we have found women enrolled in such programs, their numbers have been small.

During the first phase of our study, our time was spent primarily trying to locate 10 schools which, during the 1973-74 school year, offered at least one traditional male vocational program which attracted five or more females. The criterion of five females is an arbitrary decision, but it was necessary to establish a standard which could be applied to all states. In addition, it was decided that an enrollment of less than five females in a nontraditional program might more likely represent an effort by a few "unusual" females to break the sex barrier rather than a positive effort or encouraging climate fostered by the school. Nontraditional programs include most T&I programs, such as auto mechanics, welding, masonry, carpentry, certain agricultural programs, and some of the less definitive nontraditional programs such as drafting and lithography.

Contacts were made with departments of education in all of the 50 states and the District of Columbia as well as several research coordinating units. Only three states have failed to provide any response after several follow-up contacts. Responses from the states fall into several categories: a very few states (three) declined the initial request for information as too costly (e.g., necessitating a special computer run) or too difficult to fulfill; and three states were able to state categorically at the time of the initial contact that there were no programs offered in their states which would meet our criteria—five females enrolled in a nontraditional program at a single school. Three states checked and found no programs. The remaining states did provide some information in one form or other. A few sent the names of schools and programs which were considered too "borderline" in terms of traditional-nontraditional to include in the sample. Many sent the names and addresses of schools which they thought might have such programs. All such leads were followed, with varying degrees of success. The remaining states provided lists of schools with programs as well as 1973-74 enrollment figures, presumably based on the reports submitted last year by the schools to the state departments of education.

Many inaccuracies were found in the data obtained at the state level. All too frequently a potential program on a state's list is noted, but when contact is made with the school directly, it is found that females have never been enrolled in the cited program, or in a much smaller number than appeared on the list received from the state department of education. The reason for the discrepancies has not been identified; perhaps the states' figures do not reflect completions; perhaps the figures represent the number of students who enrolled in the program on the first day of the course. An attempt will be made to document—with some accuracy—the existence of programs throughout the country with "significant" female enrollment.

There are schools which are making strong efforts to enroll women in non-traditional vocational programs, beyond simply asserting that there will be no discrimination by such tactics of counseling, visiting schools both by teachers and female students, etc. But what schools fail to recognize is that such methods are inadequate. Many females currently enrolled in male programs would have done it simply because they are disciplined, assertive, and aggressive—they are determined to "do their own thing." But what of those female students who would be interested and even those who are not interested at all?

We, at Penn State, are very proud of the fact that in a report published in 1967, based on a study conducted between 1964 and 1966 (prior to the development of the recent strong women's movement), we stated:

"In recent years the vocational experience of women has been receiving increased attention. In the past there was a tendency to believe that women were only part of the labor force until they married. It is now recognized that to an increasing degree women are either remaining in, or re-entering, the labor force except for brief periods during the childbearing years. The old and weak argument that training given to young girls is wasted has less weight at this time than at any period in the past.

"In the light of this trend, how adequately have young women been trained to prepare for and control their employment experience? Much of the data necessary to answer this question has already been present . . . and, in general, it appeared that girls were being prepared adequately for the narrow roles that society has set for young women \* \* \*

"The evaluation of the vocational programs in the schools criticized the limited number of vocational options open to females, especially in the trade and industrial programs. This is the fundamental weakness of the vocational offerings for females. In effect, society, through its schools, tells young girls who do not plan to go on to college that they are not capable of obtaining and holding jobs other than as clerks and secretaries. Although this condition would seem to stifle aspirations and to induce frustration, young women do not seem to respond in these ways apparently because their vocational self concepts are so limited by the cultural conditioning to which they are exposed that they see very few occupations as appropriate to them. . . .

"The female respondents who did not expect to go on to college selected their high school courses mainly to prepare for jobs. Few made a decision on the basis of interest in the courses. Most discussed their course choices with guidance counselors, but they did not discuss their job plans. These plans were highly concentrated in a few occupations that society deems appropriate for young women.

"There were very few long-range considerations in the job plans of these young girls. Their immediate post-high school jobs were seen as interludes before they married and raised families. When asked in the course of the interview the types of jobs they would like to have in ten years, about three-fourths of all the female respondents replied housewife. Apparently, vocational goals are regarded as subsidiary to the primary female roles of wife and mother. . . .

"When the favorable and unfavorable evidence is added up, vocational education does appear to be doing an adequate job, but it is being restricted by the prevailing stereotypes as to the proper occupations for women. These are the same stereotypes that restrict the vocational self concepts of young girls. Few jobs are perceived as appropriate, and even these are considered subsidiary to the real female roles of wife and mother.

"It has been established for some time that there are no basic differences in intelligence between the sexes. When given the opportunity, women have proved they can handle almost any job that a man can. With the increasing demand for highly skilled individuals, society cannot long afford the waste of human resources caused by the prevailing limitations on the utilization of female abilities."

What, in effect, were we saying in 1967 and can say today? To me the words from South Pacific, a musical, "you have to be carefully taught," are appropriate.

This means that blame cannot be placed solely on our vocational schools. They have inherited, in the secondary schools, young women who have been carefully taught by their parents, their peers, their elementary school teachers. In fact, society has taught them to accept their "appropriate roles."

Thus, the schools are faced with the problem of changing attitudes and behaviors of various groups in our society, including parents, children, teachers, counselors, school administrators and, yes, even members of our state legislatures and the federal Congress. I need not tell this Committee the long time that has elapsed between the recognition of the need to restructure the Congress and its committees and the actual achievement. And I need not tell this Committee that there is a gap between form and substance.

Vocational educators, particularly those interested in achieving the goals which Congress established in its various pieces of legislation, also face similar obstacles. This means that the constraints must be faced and plans to overcome these constraints must be developed.

It has been my experience that the concept of planning, let alone practice, is very foreign to all educators. They continue to assume that "all things can be done," as if they had unlimited funds. Nor can they visualize the restructuring of the educational process by which better education can be achieved even with the same funding. They refuse to recognize that learning is a lifetime process and that they must provide conditions for learning and not just "teach." It is not enough for vocational education to train youngsters for an occupation, place them in jobs, and then forget them and allow them to struggle in the rapidly changing world of work. Youth must be trained to know how to learn new trades and occupations, either on their own or from educational institutions in communities which are concerned with more than training a specified age group.

Although Congress has specified the development of state plans for achieving certain goals—including nondiscrimination on the basis of sex and race, school administrators do not know how to plan for these goals. They "must be carefully taught." Let me illustrate this point in connection with our discussion of discrimination against women in vocational education.

Some administrators think that the mere announcement of state policy against discrimination meets the requirements of Congress. Local school administrators think that the announcement that young women can enroll in any vocational program is sufficient. And others who go directly to the junior high schools with counselors and even some young women to explain that there is no discrimination is sufficient.

We find that there are subtle institutional and other inhibiting factors operating. Let me illustrate from another area. An official of a large public utility in a large urban area explained to me that it is not enough to announce publicly that it is "an equal opportunity employer." A young black may have never utilized a transportation system from a ghetto area into the business district. He/she may never have entered a large business building with a battery of elevators and elevator starters. He/she may never have confronted a receptionist on the appropriate floor. He/she may never have taken aptitude tests. And I can go on with a longer list.

Similarly, young women face similar problems. Teachers who are unsympathetic to their enrollment in traditional male vocational programs. Toilet facilities in vocational schools—particularly in the areas of traditional male programs—do not exist for women. The peer pressures from their female and male friends may be great.

To what extent do teachers and administrators in vocational programs discuss these issues not only among themselves but with both the female and the male students?

One of the major purposes of our study is to uncover these obstacles, find what schools have done about them, and suggest to other schools what can be done. This is our most difficult task because these elements are subtle and not easily learned or observed.

In the broad area in the attainment of certain social goals, Congress has generally assumed that the legislating of these goals is sufficient. Unfortunately, in our society man is moved by his strongest motive and not his highest motive. I would suggest that Congress provide for a system of financial incentives for the attainment of its goals. States should be allocated funds not only on a so-called "equitable" basis, but also in relation to the achievement of legislative goals. In turn, states should reimburse schools only if similar goals are achieved. The incentive system should be such as to reward the achievers and penalize the failures. Why not apply to school administrators the same pass-fail system they have imposed on students?

Another important factor in the small number of females enrolling in traditional male vocational programs is that most do not have a "role model" to follow in terms of occupations. We know that the best predictor of a young man's occupation is the occupation of his father. Similarly, the best predictor of a young woman's role would probably be her mother. To what extent, then, can we accelerate the change in a young woman's attitude towards work and her appropriate occupation? It would appear that considerable effort must be put into developing women's (older) occupational roles so that their daughters can use their mothers as models. Greater emphasis should be placed on upgrading women in the labor force, either through the breaking down of prejudices of employers or through training processes. Certain financial incentives—with appropriate safeguards—might be helpful in this connection.

A colleague of mine has raised an interesting question involving working women who exit from the labor force during their childbearing stage of life

and then re-enter the labor force. According to him there is bound to be an erosion of skill through disuse or because of technological changes. This not only makes these women less competitive with men but also makes them less competitive with women who remain in the labor force. Certain educational opportunities should be made available to them while at home or when they re-enter the labor force.

#### CONCLUSION

What does one recommend to Congress in order to improve the access of women to traditional male vocational programs when confronted by a variety of psychological and societal barriers which have existed for centuries? How does one change the attitudes and behaviors of employers, boards of educators, school administrators, federal and state officials, and, yes, even congressmen, all of whom are predominantly male? How do young women, who have been trained since early childhood to "dislike" certain occupations, shift their attitudes when being admitted to high school? How can they resist the pressures of their peers? How can we change the attitudes of their parents?

These are difficult and complex questions. A Swiss historian once said that "the essence of tyranny is the denial of complexity." At the risk of being tyrannical let me suggest the following:

1. That the use of an incentive system be considered so that schools are rewarded if they achieve certain socially desirable goals.

2. Funds be made available possibly through an incentive system, whereby schools are reimbursed for extra efforts in counseling, in-service training for school administrators and teachers, and educational programs for parents and employers.

3. Employers be subsidized for acting in a manner consistent with the goals established by Congress in the form of tax benefits or subsidies.

4. Funds be made available for the training of administrators at the federal, state, and local levels in the area of planning. The state of the art of planning is considerably ahead of its practice.

5. Research be supported in the area of how to reduce sex discrimination in vocational education by experimenting with various approaches. And this research can best be conducted by social and behavioral scientists who, too often, have been neglected by vocational educational administrators.

Finally, I offer our assistance to the Committee in the development of any legislation designed to expand opportunities for women which, after all, is in the best interests of our society.

#### REFERENCES

- Bergman, R. Occupational segregation, wages, and profits when employers discriminate by race or sex, *Journal of Political Economy*, March-April, 1971.
- Bernard, J., *Academic Women*, The Pennsylvania State University Press, University Press, University Park, Pennsylvania, 1964.
- Buckley, J. E., Pay differences between men and women in the same job, *Monthly Labor Review*, November 1971, pp. 36-39.
- Fuchs, R., Differences in hourly earnings between men and women, *Monthly Labor Review*, May 1971, p. 4.
- Gubbels, R., Characteristics of supply and demand for women workers on the labour market, *Employment of Women*, OECD, Paris, 1970, pp. 99-111.
- Hedges, J., Women at work. Women workers and manpower demands in the 1970's *Monthly Labor Review*, June 1970, pp. 19-29.
- Kaufman, J. J., Schaefer, C. J., Lewis, M. V., Stevens, D. W., and House, E. W., *The Role of the Secondary Schools in the Preparation of Youth for Employment*, University Park, Pennsylvania, 1967.
- Kaufman, J. J., and Lewis, M. V., *The Potential of Vocational Education: Observations and Conclusions Based on a Study of Three Selected Cities in Pennsylvania*, University Park, Pennsylvania, 1968.
- Kreps, J., *Sex in the Marketplace: American Women at Work*, The John Hopkins Press, Baltimore, 1971.
- Lewis, E. C., *Developing Woman's Potential*, Iowa State University Press, Ames, Iowa, 1968, pp. 110-122.
- Parrish, J. B. *Women in Engineering. Some Perspectives on the Past, Present and Future*, Engineering Foundation Research Conference, New Hampshire, July 1971.
- Sanborn, H., Pay differences between men and women, *Industrial and Labor Relations Review*, July 1964, pp. 534-550.
- Sear, B. N., Education and vocational training in schools of various levels, *Employment of Women*, OECD, Paris, 1970, pp. 113-129.

U.S. Department of Labor, *1969 Handbook on Women Workers*, Superintendent of Documents, Washington, D.C., 1969, pp. 204-206.

U.S. Department of Labor, Employment Standards Administration, *Fact Sheet on the Earnings Gap*, Washington, D.C., December 1971.

Williams, A., Women in medicine. Some themes and variations, *Journal of Medical Education*, July 1971.

**STATEMENT OF DR. JACOB KAUFMAN, DIRECTOR OF THE CENTER  
FOR HUMAN RESOURCES, THE PENNSYLVANIA STATE UNIVERSITY**

DR. KAUFMAN. Thank you, Congressman. I don't intend to read the statement. In fact, as a result of the delay, I may change some views since I last wrote the statement.

I am Jacob J. Kaufman of Pennsylvania State University. I am a professor of economics and director of the Institute for Research on Human Resources.

For a good number of years now, approximately 10 years, we have been engaged in a variety of projects dealing with vocational education, although we have done work in corrections, manpower, and so forth.

I would like to make a few very preliminary remarks. First, that I became interested in the problem of vocational education a little more than 10 years ago when a colleague of mine in vocational education and I happened to have lunch together one day. I was interested in problems of the unemployed youth; he was interested in vocational education, and we found a rather natural alliance.

Over the years, we have been studying, visiting, talking with a variety of vocational schools. We have met and have had many conferences with many people. I won't go into any great detail, but what I am always amazed at is that whenever you investigate any of these problems you find, for example, that no State ever falls below the average. It is always the other State that is doing something worse than the average. Or if you suggest something that ought to be done, the suggestion is: "We are already doing it," or if they tried it, "It has not worked," or if there is any attempt to be critical of vocational education, the argument is frequently made: "Well, that is true of the academic side, vocational or even higher education," or if you happen to suggest that the school ought to be doing something about a particular problem, they would say: "Well, we are dealing with the problem of environment, the home, the community attitudes, and so forth," which, of course, everyone could say.

Then there is always the final comment that: "Well, it is true of all institutions in society. They don't always achieve the objectives that Congress set out for them."

What I am trying to suggest is that I recognize all of this, but, if we always took this position, nothing would ever be accomplished. Someone has got to make a first step, and I would stress the fact that, if I were talking on another subject like higher education or academic education, I might sound critical. I don't think I am, but we are on the subject of vocational education, particularly with respect to sex discrimination.

I would also like to thank the Office of Education for having supported us in the study, which I am not going to describe. I think it

is to their credit that about a year ago, when we submitted a proposal to do a study of approximately 15 schools in the United States which presumably or allegedly were enrolling women in traditional male vocational programs—and I underscore “traditional male vocational programs”. I do not mean even gray areas.

We eventually will be visiting about 10 schools. We have already visited about eight and have two more to go, around the country.

I am not going to read to you at all the description of the project and how we are going along. I would also like to say at this time I think it would be rather improper for me to state what the results of our study are. Frankly, they are not all in. On the other hand, I think, having visited schools and having read a good deal and discussed this problem, I would like to make some very general comments that I think would be useful.

One of the things that we are most proud of is that in 1966, again with the support of the Office of Education, we did a study in vocational education, and, in that report, which appeared in 1967—and I teasingly tell many people that this was before the womens' liberation movement really took on any momentum—we had a chapter in there called “Girls in Vocational Education.”

When we interviewed really thousands of young women and asked them whether they felt that vocational education had done a good job for them, they said: “Yes.” Were they happy with their jobs? They said: “Yes.”

Of course, most of the jobs were in the typical female programs of business education. In our statement I do point out—I like to quote this very, very frequently, that back in 1966, as I said, we really in effect said along the lines of a song in South Pacific: “You have to be carefully taught.”

They responded by saying that they were satisfied with vocational education. They got their jobs. But really when it is all added up, it was that they were really restricted to only two or three major programs.

I must quote from this because, as I say, the three males on the project are very proud that we said this before many females were saying this.

We said that: “When the favorable and unfavorable evidence is added up, vocational education does appear to be doing an adequate job, but it is being restricted by the prevailing stereotypes as to the proper occupations for women. These are the same stereotypes that restrict the vocational self-concepts of young girls. Few jobs are perceived as appropriate, and even these are considered subsidiary to the real female roles of wife and mother.

“It has been established for some time that there are no basic differences in intelligence between the sexes. When given the opportunity, women have proved they can handle almost any job that a man can.

“With the increasing demand for highly skilled individuals, society cannot long afford the waste of human resources caused by the prevailing limitations on the utilization of female abilities.”

This means that the blame cannot be placed on our vocational schools. They have inherited, in the secondary schools, young women who have been carefully taught by their parents, carefully taught by

their peers, carefully taught by the elementary school teachers. In fact, society has taught them to accept their roles.

Thus, the schools are really faced with a very difficult problem, and I would be the last one not to recognize the difficulties.

One of my favorite comments about it is that I am very happy to accept the notion that a school faces severe constraints in trying to overcome many of these attitudes of behaviors on the part of other groups.

If they would only recognize these constraints and, then again, sit down and say: "What can we do?" The typical response you get is: "Well, we have really never discriminated. The girls have always been welcome." The same factor that we have heard in the case, of course, with blacks. It has been exactly the same explanation.

I was struck—and here I might be identifying one of the schools we visited, but, since it is constructive—but I won't identify it. I will just describe it. We did visit a vocational school on an Indian reservation in which we discovered that females were heavily involved in agricultural production education, and the explanation given, of course, was—which we have checked out and which we accept—was that the culture accepted this.

Now, to my mind, this almost proves the whole point. All of the other arguments that women cannot handle tractors, that they don't know machinery, that they don't know how to handle tools, as well as the problem of safety and the heaviness problem—when the culture accepts it, it is there.

It is a culture which is heavily matriarchal, and the women have gone into these agricultural production programs. When we interviewed potential employment in this area, which is a heavy irrigation project, the potential employers looked shocked that we had even asked the question whether they would hire the women. It was natural and part of their culture.

That almost in itself tells you, it seems to me, a good deal.

Now, obviously what we must do is a restructuring, to a very large extent, in my judgment, of the whole educational process, and somewhere in this statement I say that I think Congress could appreciate the difficulties that educators have in restructuring the educational process when it took you many, many years to do some restructuring in recent months.

So, if it took Congress so many years to do some restructuring, I think we should have a full appreciation of the problems that education might have. I don't know which is really the more difficult job frankly, but I think there is that appreciation.

My major concern is not that the doors aren't open. Most of the schools will tell you: "We do not keep the women out," but they are not there. What amazes me when I visit many of these schools is that boys and girls are in English; they are in Social Studies; they are in everything else. Why aren't they in these vocational programs, particularly that are traditionally male?

It isn't in many cases that they are kept out. They just say: "The door is open," but that is not enough for these youngsters to overcome that.

What I have been suggesting a good deal to many of my friends at the national level, at the Office of Education, and I would say

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What I have been suggesting a good deal to many of my friends at the national level, at the Office of Education, and I would say

that they accept this notion, is that down below, most of the schools—and this is true, I might add, of higher education or academics—haven't the foggiest notion of what it is to plan to achieve a social goal.

In my judgment, it isn't enough for Congress simply to say: "Here is a goal to be achieved." I think if we look to a lot of legislation—and I won't go into it. If we look at legislation dealing with the employment service or higher education or corrections, that we have been interested in, the rhetoric is there. The goals are stated. A memorandum might be sent out, but then nothing really happens because down below there is no understanding of the meaning of planning.

I frequently have said that the notion of local administrator—I have said this is the area of manpower. Planning to anyone means 10 percent more than last year, and that is the end of planning. There is no concept of goals. There is no concept of alternative processes. There is no concept of alternative costs. There is no system of evaluation to see whether you have achieved your goals. There is just no understanding of what we mean by that.

I was speaking of the local educational administrators in the area of planning and the failure to understand the concept of planning, their failure to recognize the constraints that exist, and the failure to develop a plan to overcome the constraints.

If a local administrator would say to me—He doesn't have to say to me—that I have a problem with parents. They don't want the young girls to go into these traditional male occupational programs. The language is different. I reassure them that the female language today is no different from the male language and so forth.

I would ask them: "Well, what plans do you have to overcome this problem," and they have none. They simply use constraints as an excuse for not doing anything, so the planning process includes the overcoming of constraints, even if it meant 2, 3, or 4 years, but a goal, a plan to do something about this.

I wanted to come to a conclusion because I would much prefer some questions if they would come forth. I do ask: What does one recommend to Congress in order to improve the access of women to traditional male vocational programs when one is confronted with such a variety of psychological and other barriers that have existed for centuries?

How does one change attitudes and behaviors of employers, boards of educators, school administrators, Federal and State officials and—yes—even congressmen, all of whom are predominantly male?

How do young women, who have been trained since early childhood to "dislike" certain occupations—and dislike is in quotes—shift their attitudes when being admitted to high school?

How do they resist the pressures of their peers? We interviewed many young women in the schools who had the courage, I might say, to take on some of these courses under pressure from their peers, which was very great, and I might add we even interviewed males who took traditional female occupations, and I really wish females could appreciate the peer pressure on the male who decides to take a traditional female course. He runs into a great deal of difficulties.

Now, I don't know the answers to these particular questions, but I would like to recommend two or three which are almost my religion in the whole field of education. If it were in other areas, I would recommend the same thing.

A colleague of mine keeps repeating to me that man is moved not by his highest motive, but by his strongest motive, and the strongest motive is money. Now, I know it sounds crass and materialistic, and what I mean by money is to develop an incentive system.

Now, we did a study for the State of Michigan which was very much interested in expanding vocational education, and the legislature in that State said to the individual school systems: "If you expand your vocational education programs, we will reward you with extra money because of the extra costs."

When they came to us and said: "Well, how should we do it?" the first thing we warned them about is: "Don't give everyone the same amount of money because for certain programs there are no extra costs."

I have heard lectures in vocational education as well as the shop work, and different programs have different costs, so they reimbursed schools for expanding vocational programs.

We estimated what the extra costs would be, if it were in home economics or in auto mechanics, and said: "This is the best way to maximize," which is what we economists want to do with limited resources, "the money that you have."

Why reward when there are no extra costs? So the incentive system must be introduced in some way or other. I am very disturbed by this tendency that affects me from the research point of view that all States must share equally or on a certain basis of population of one sort or another.

I would much prefer that Congress set up certain goals and reimburse States and school systems if they could demonstrate at some future date that these goals which Congress has set are achieved through a system of information—and I might add, a good system of information—then rewards might be placed.

Now, it might call for extra work to be performed. For example, more people going out to the junior high schools and explaining to young women the potentialities that might mean more inservice training.

I remember the point I wanted to make earlier, that what we found is that local education administrators don't even know—and I am generalizing now—don't even know how to deal with the problem if they run into a problem of women enrolled in vocational programs and there is some "hassling" in the classroom.

Do they ever think of bringing the students and teachers together and having a discussion of: "Here is the problem. What do you think ought to be done? How do you think it ought to be handled?" All you hear is announcements over the loudspeaker system. "Don't do this. Don't do that."

There is really no understanding of a sense of participation on the part of students, counsellors, and teachers. It is all done by administrator fiat, and this is not going to solve any problems because there are problems that ought to be mutually discussed.

Sometimes when a young lady enters a class and she is "hassled" a bit by the young men, instead of the teacher opening up the discussion with the class and saying: "Look, we have some young women in the class with the males. They are interested in this program. What could we do to work things out together?" This isn't done at all.

Or if teachers get together and try to work something out, they rarely get together to discuss a common problem with the particular principal educational administrator.

In that sense, so much of education is being managed and not led, and I would say this is across the board. I will even go after higher education.

I would also like to recommend that some funds be made available for the training of administrators at the Federal, State, local level in the area of planning.

The state of the art is very much ahead of the practice. In fact, I was fortunate enough to be a consultant in Massachusetts when Mr. Buzzell was director of vocational education, I think the associate commissioner of vocational education, in which they instituted an information system for occupational education. It was one of the most exciting experiences I have had because there was complete understanding of what the planning effort is. He is now, of course, at the national level, and I have great hopes that something will be done along these lines.

Another point that I would like to suggest is that again some incentive system, a system of rewards for schools that will try and start experimenting with certain ideas, and reward them for these particular experiments.

I have tried to walk a very careful line because many people think in the field of vocational education that I have been a critic of it, and I have been, but I really think that vocational education is a process—a key to the whole educational process.

I think the day ought to come when we eliminate the words, "vocational education." There is a lot of know-how there in vocational education if they will only spread it out and develop a total educational program, and I think the opportunity is there.

My criticism of vocational education has been that they haven't seized on this opportunity to expand it, and I think they can do a great job, particularly in vocational education, to break down the barriers against women enrolling in these male programs.

Thank you.

Mrs. CHISHOLM. Thank you very much for your statement, Dr. Kaufman. I can see that you have a very, very deep conviction about this subject.

I wonder how far we are going to be able to move ahead in the area of vocational education in view of the fact that traditionally women have been given certain prescribed roles in this society from the moment of their birth. As women begin to get advice and guidance and counseling from persons who are a part of a society that has very stereotypical ideas of the roles women should play it becomes very difficult.

Do you really believe or feel that incentives in and of themselves are going to be the answer, or like myself do you begin to wonder if it would not be necessary for a new type of education in this

society to occur, one having to do with psychological orientation and psychological conditioning of attitudes?

Dr. KAUFMAN. Well, I would not disagree with you. It is a necessary—we like to say “not a sufficient condition”, as an economist. And I am old enough to recognize this, and I was in Washington at that time. I was amazed to see how good full employment breaks down an awful lot of prejudice.

I remember the day when you never saw a female bank teller in a bank because the attitude would be: “It is unsafe. Women don’t know how to count. They don’t know how to handle money.” Now, when you go into a bank, you only find females.

You heard stories during World War II about how blacks could not work on assembly lines up North. I have seen, when I lived in Washington many years ago, when the statements were being made. People weren’t trained psychologically, culturally—blacks to work in certain white jobs.

It is amazing what full employment could do, so I would also like to add there is nothing like a full, tight labor market in the sense where there are really more jobs available than people seeking jobs. It is probably a very good condition for breaking down these particular barriers as well.

Mrs. CHISHOLM. Dr. Kaufman, I realize that you have not yet published your research, but I would wonder if you would be able to tell us of your findings about the kinds of families and backgrounds students who take nontraditional courses come from.

Dr. KAUFMAN. We—I had occasion—and, since I am the project director, I take advantage of it—I like to interview the young people. I find this much more interesting, frankly, than interviewing the other people.

A lot of the females that you find taking traditional male courses today—they are going to take it, come hell or high water. They are not going to be stopped.

I was fascinated by a young lady who told me that she went out for the football team in one school district. She gave up after spring training because she felt it was a little rough and she could not take it. I thought it was unfortunate because it would have been fascinating to follow through what would have happened.

Mrs. CHISHOLM. I was wondering if in your research thus far you have been able to see any kind of breakdown in which a particular group, perhaps on the basis of race or the basis of economic level, more likely to take the nontraditional courses. Do you see any patterns?

Dr. KAUFMAN. No. We have been in places where we have seen—outside of the one cultural environment that I referred to which was very interesting—blacks, whites, Spanish-speaking students in that.

I think though that the basic characteristic is that these young women have an attitude—and it is really refreshing—that they are not to be denied, but I want to stress that these are not the ones for which we need legislation. These are not the ones for which we have to really prescribe incentives. These young women are going to do it.

What I am referring to is—and I think it is what prompted your first question—the ones who are very reluctant to try. I could just see some average young female trying to tell her father about her taking auto mechanics where they have all these boys.

The father could get quite disturbed. I can't quite understand what he gets disturbed about because there are a lot of boys in English and social studies and so forth, and for many other reasons as I observe these days I don't really know why he gets disturbed, but I think these pressures are very, very great.

In one school that we visited which was rather impressive, they sent some of the young females who took traditional male courses into the junior high schools to talk to other females and explain to them: "It isn't so difficult. It isn't a problem. We can manage. We can get along."

Frankly, I asked one of those young women: "Were you told what to do, what to say?" The answer was: "No."

There is one point which I did leave out which I do want to stress. We telephoned every State in the United States to find programs, and I will tell you that we uncovered 11. And that doesn't mean that there aren't more. I am just saying that the data at the State level are very inadequate, very inadequate, and trying to find places where at least five or more females were enrolled—that was our original figure, five, because we felt there would always be a few, but we came all the way down to five, and even there we had difficulty because when we eventually got to the schools we discovered the females were no longer enrolled.

I could illustrate. We canceled one visit just yesterday—I am sorry—on Friday, because we originally found that they had three programs in which six females were enrolled at the opening day, but by the time we wanted to visit the school it was down to zero.

Now we are not going to visit that school because frankly we planned to followup on some of the females.

So the data are poor, and even data that pours out of computers at times is not accurate and something must be done, and I am sure the U.S. Office of Education is conscious of this, to get adequate data, not just in terms of numbers of students enrolled the first day. I also have enrollments the first day, and I know what happens 3 weeks later. It declines very rapidly. And the reason might be the peer pressures, the lack of understanding of the teachers, the lack of understanding of an administrative, the lack of understanding of counselors, and they will just not go back again. They are not going to fight about it.

Mrs. CHISHOLM. One final question. You speak of women already in the labor force, and this was a point made in the March 17th hearings by the Congress of Labor Union Women.

Would you then specifically have us earmark moneys under this legislation to go to junior and community colleges specifically for such purposes?

Dr. KAUFMAN. I smile because to be very, very frank Pennsylvania State University has about 19 or 20 commonwealth campuses. I was visited one day by the gentleman who concerns himself with these problems. Universities also have their lobbies. He was terribly concerned about what my testimony would be when I appeared before this particular committee.

My reaction to postsecondary education is going to sound slightly evasive and not because of the pressure of the university. I have tenure. They can't fire me. [Laughter.]

Is that a lot of the youngsters in secondary schools really don't know what they want to do. An awful lot don't even know what they want to do when they are in college, but they, generally speaking, are more mature at the postsecondary level, and, if some of them had some kind of an experience of having gone into the market looking for a job and not having it and then coming back, there is this particular incentive now to continue school.

I also think that postsecondary education has unfortunately been operation second chance in the United States, and particularly as these youngsters are a little bit older and have had some bad experiences.

I foresee frankly the time when we ought to get rid of this notion that for 8 or 12 years you must go to school. I don't see why there cannot be intervention from time to time, movement up and back from one school to another.

This notion of having a high school diploma, I think, has been heavily overstated. It is an excuse and not a reason, and I would like to see some form of vocational education or occupational education developed along the lines which Carl Schaeffer and I recommended for the State of Massachusetts, and that is to set up an institute for educational development in a community which would be available not only to high school students, but people who dropout, people who went to work and want to come back later, even for adults, 7 days a week, 24 hours a day, for people who want an opportunity for training.

I just don't see why in these schools—some of these area vocational schools, incidentally, could not really become community institutions, and they ought to stop being called "high schools" or sometimes "secondary schools".

We suggested nothing novel. Call it the institute for educational development and just become a fine community place where people can go when they want to go to get training or other kind of education.

Mrs. CHISHOLM. Representative Mink.

Mrs. MINK. Thank you very much. I appreciate the opportunity to participate in these hearings which I consider very significant, and I thank you, Dr. Kaufman, for your contributions.

Your last response troubles me somewhat. Your response to the Chairperson's inquiry with regard to whether funds ought to be spent at the junior college and community college levels, or whether really the problem at hand can better be resolved in directions and with incentives that we might construct in the elementary, intermediate, and high school levels.

This issue troubles me a good deal because I think in the past vocational education emphasis has been in the area of career and occupational training, which too often has been restricted to postsecondary higher education programs.

If we are to really do something about sex discrimination in education and sex discrimination in the development of career incentives and initiatives on the part of the individual student, shouldn't we be devoting a good deal of vocational education funding and related funding to a much earlier age in our educational system?

Dr. KAUFMAN. Yes, because all the way back—even, I think you could make an awfully good case—I have said this before, to the consternation of educators—that, if we spend \$50 or \$60 billion a year on education, it maybe would be worthwhile to halve that and spend half of it before the youngsters enter school, and that investment might even have a better payoff than all of it at the elementary and secondary level.

Now, I cannot prove the case obviously, but I have often challenged people whenever I make an alternative suggestion when they say: "Well, will it work? Will it be effective?" I always say: "What makes you think what you are doing today is effective?"

You notice every time a new suggestion is made, it must be perfection as if what is going on is so perfect that we should not change it unless it is perfection.

If I were a decisionmaker, which, fortunately, I am not, from the point of view of many people, I would much rather invest in early childhood education, and frankly I was terribly disturbed several years ago on the veto of a very fine bill dealing with child day care centers.

Mrs. MINK. Well, I agree with your comments, and that bill on child care came out of this very committee, and we are again working on the same sort of legislation, and we would hope that the emphasis would be in terms of the total individual, that it will be effective, and that we will somehow be able to get away from all the stereotypes and notions that there are traditional ways that one needs to behave.

Apart from that, going back to our current institutions at the elementary and secondary school level, shouldn't we be devoting some of these funds to the elementary level and developing career types of educational programs at that level? How do we motivate a female student into a "nontraditional educational program" in high school and college levels? Isn't that really what the whole issue is?

How do we somehow overcome the societal pressures and attitudes created by family notions of what the community "expects" of women and what the peer group pressures are with respect to employment of women in nontraditional roles?

If the real problems are the attitudes, then shouldn't we be directing more of our funds to an area where we can somehow correct these attitudes or at least make the students aware that for both sexes there should not be "traditional" roles?

Dr. KAUFMAN. Well, it is the usual question. Do you want to go back to where you spend all of your money or where you spend all the resources on the original cause? What about those already in the process?

Mrs. MINK. If we don't go back to the root causes, Dr. Kaufman, aren't you always then involved in compensatory programs at a level when it is too late?

Dr. KAUFMAN. My general feeling is that what one has to do is to go into parallel programs. In the one sense, do you want to really raise—and this is a rhetorical question. What about those who have already been through elementary school? Do we write them off? Shouldn't they have some opportunities? Should it all concentrate

there? No. We also ought to simultaneously go at root causes because some 20 or 30 years from now you will be hearing testimony here along the same lines. We are still dealing with root causes.

I have stated frequently that, if we had dealt with the root causes 20 and 30 years ago, we might have some answers to some problems today, but that the impatience—and I was a social scientist. I consider myself a social scientist.

I am always amazed at the impatience everyone has with social scientists. You know, if someone takes—says it takes us 10 years to develop something in physics, well, fine. Work at it. But the social scientist must solve the problem tomorrow. We want an answer tomorrow and we cannot wait, and the pressures are really very, very great.

I would argue that, had we sought answers 20 and 30 years ago to many of these problems, the answers would have been here today, and, if we continue always looking for the quick answer, 20 and 30 years from now we will still be looking for the quick answer.

Mrs. CHISHOLM. Mr. Lehman?

Mr. LEHMAN. Thank you, Mrs. Chisholm. I just returned from the National School Board Association meeting last night where I appeared at a meeting which was entitled: "Sex Discrimination in Public Schools."

I was trying to get the direction focused on things like vocational education, but the people seemed like they were overly concerned with how you keep boys from participating in girls' sports when there is only one team.

Somebody said: 'We have our girls' volleyball team and it won the championship in the State of Illinois, and we had one girl on the team.'

These are the kinds of things that I think are so unfortunate because what we really need to deal with is vocational education and things in that field. The problem with vocational education is the fact that nearly half of the people—nearly half of the girls enrolled in vocational education are in homemaking courses. It seems like it is going to be impossible to get this out of the vocational education and into the regular curriculum or into another kind of curriculum so we can use half of the vocational education for girls for the kind of skills and the kind of aptitudes and things that will give them better earning ability.

My question is: How can we get more boys into these homemaking courses and drive the girls out, I guess? I don't think there is any other way to do it. I think the way you can do that is to perhaps restructure these homemaking courses so they will appeal to boys, if there is such a way to do it, because home repair and even courses in home construction, for instance, could be forced into things, because I know women now that are the only person in the household with young children. They have to make their rooms and repair their plumbing and do everything. Nobody can afford to bring anything in, any skilled labor in from the outside to do this.

If the woman has her own place and she wants to repair it, the only way to do it is to be able to do it herself, and I would like to see—I guess I am making a speech instead of a question.

How can we reconstruct these awful homemaking courses so that they will appeal to boys, and so that we can get the girls into skilled training courses?

Dr. KAUFMAN. I could always feel comfortable in making a comment about a statement. Could I make just two brief comments?

First, a colleague of mine suggested maybe we ought to change the names of these courses. For example, he said: "Don't call it 'auto mechanics.' Call it 'transportation.' Change the names."

I want to go back to your first point.

Mr. LEHMAN. Let me ask this. Could you give me an idea? Why can't we call it combination auto mechanics and homemaking? A woman can't get along without an automobile any better than she can without a home.

Dr. KAUFMAN. On your first point, what is beginning to worry me is this. There is a tendency for the American people to create—I am being very blunt and frank—false issues.

Now, one issue which I know is very divisive—I happen to think the busing issue is a false issue. Similarly, on sex discrimination, the big issue becomes: Should the girls play on the football team, as if that is really the main issue.

This is going to be used more and more. "Do you want your daughter to play on the football team with a male? Do you want them to play basketball?" This is what the community gets all excited about.

I notice in San Francisco when they cut out \$200,000 to eliminate athletics, my God, the community was in an uproar on account of that. They just cut \$200,000 on some good—

Mr. LEHMAN. They even condone a rock concert to get it straightened out.

[Laughter.]

Dr. KAUFMAN. I am really afraid athletics is going to become the issue.

Mrs. CHISHOLM. Representative Quie?

Mr. QUIE. Thank you. Dr. Kaufman, let me ask you about a few of the goals that you speak of in the conclusion of your statement. One of the questions I have concerns the categorization of vocational education of all the new money. In 1968, we removed all the categorization with the exception of home economics.

Do you think our continuing to have home economics as a category different from other vocational education then is sexist in nature? Would we be better to remove that category so that the Federal Government may make money available for all skills without any differentiation? Should we put it all together and let them make all the decisions at the local level as to what is to be made available?

Dr. KAUFMAN. I wish you would have asked that question of some home economists who have some good ideas of what home economics really ought to be like. If you really don't mind, I just don't want to get into that kind of territory because I have some very good friends in the field of home economics who have some fine attitudes and understandings of what home economics could really be about, whatever we call it, which could enroll males, and I just will add this footnote.

One of the things by which I have struck that is missing from all of education, including vocational education—there are certain humanistic aspects to it which ought to be introduced, and I think the potential of home economics in that area might be very, very great if we change the name possibly, but the name should not be the problem. It is the content that ought to be changed.

Mr. QUÉ. I will ask someone else, but let me ask another question on that subject. You say that there ought to be incentive systems so that the schools are rewarded if they achieve certain socially desirable goals. Who sets up these socially desirable goals that would reward them? Does Congress set them up? Does the U.S. Office of Education set them up? Should we have a State plan to set them up? How do you find out what those socially desirable goals are?

Dr. KAUFMAN. Well, they could appear at all places. One of the troublesome problems that we face in education is, of course, this other point, that is considered to be local control of school systems.

Now, I remember the former superintendent of education in Pennsylvania, who was also provost at Penn State, once saying to me: "When we are talking about local control, you can go around the whole country and they all look alike." All the schools look alike. Yet, we talk about local control, so I don't really know what local control has really accomplished except everyone imitating everybody else.

Obviously, Congress, by contributing a small proportion of vocational funds, is really only adding an extra amount, though I notice the figure usually appears about 20 percent—I may be wrong about that, but roughly 20 percent of vocational funds come from Federal sources.

I happen to think the percentage is less than that because in comprehensive schools—they get reimbursed at the State level and some of that money is used for vocational, and I am not quite sure whether those figures could really be separated out, but to what extent could the extra money—the Federal Government set out the socially desirable goals?

I think that they can and should and the States themselves could—

Mr. QUÉ. I know they can. I am talking about how you identify the socially desirable goals. I mean, who is going to do that?

Dr. KAUFMAN. Well, Congress is one. We agree. The State legislature is another that could set broad goals. State boards could set these particular goals.

One of the things we find in education in general is that if you call in a superintendent of education of a State as a whole and ask him—most of the money comes from the State—what has been achieved and what are the results of the educational system, there are no answers. There are no data. There is no information.

I recall, for example, if I could use this as an illustration, I was once cochairman of a priorities commission in Pennsylvania where we have confronted this problem of how money should be spent.

Someone who spoke for prison education told me what a marvelous job was being done. They had handed out 250—I will make up a number—diplomas to youngsters in prison, and that, if they had twice as much money, there would be 500.

I asked them the question: "Well, what happened to the 250 after they got the diplomas?" Well, he didn't know. "Did they ever come back again to prison?" He didn't know. "Did they get any jobs?" He didn't know.

All he knew was that they handed out 250. Well, I had a very simple solution to save a lot of money. Let us give them the diploma without the education, if you don't know what happens as a result.

This is one of the things that is missing from so many of our social programs. We don't know the results of the expenditures of our programs. The famous word is accountability.

Now, I want to stress that educators fear this word accountability because they think that it means pass-fail. Now, I want to make two comments about that. I introduced the pass-fail concept. It is all right for the kids to pass and fail, but apparently it is not all right for educational leaders to pass or fail, but I say the purpose of an information system is not in terms of pass or fail. It is to provide information back to the decisionmaker, so he knows whether or not he achieved the goals he set out to do. If he did not, why not? Then he can make adjustments. So it becomes a feedback mechanism.

That was the beauty of kicking the word out in Massachusetts of evaluation. We never like to use the word evaluation or accountability. It is information to us as people to achieve socially desirable goals.

Now, these can be set, in my judgment. Whenever people say: "Well, there is disagreement about goals," I agree with them. They say: "How do you qualify them?" You can always attack that.

The thing to do is to have some goals, and the main point is, whether we realize it or not, the decisionmaker has goals. They are implicit. All I want them to do is make them explicit. He must have a reason for spending the money.

Mr. QUIN. Has the institute made explicit the socially desirable goals that vocational education ought to reach?

Dr. KAUFMAN. We did a study of cost effectiveness of vocational education many years ago which was supported by the Office of Education, and we followed up on students and found something about employment and earnings, and the vocational educators were very much concerned about it. They said first: "Why did you pick on vocational education?" Second, they were very concerned that cost would be higher, but they didn't understand the economists, that costs may be high, but things may be cheap. It depends on what you get for your money.

They told us—do I make my point? If something could be low-priced and expensive and something could be high-priced and be cheap, if you get something worthwhile out of it—so the costs should be related to the benefits.

The point I wanted to make is that they said to us: "You ought to—after all, vocational education is more than just employment and earnings," so we had a few questions about voting behavior, community participation, things of that sort, to see whether we can get some other results.

When the results showed no difference in voting behavior and community participation, that showed up as—in earnings and employment very favorable, I might add, toward vocational education bene-

fit costs. Then they completely forgot about the other things and stuck with employment and earnings.

One could set forth goals explicitly.

Mr. QUIE. My question is: Have you?

Dr. KAUFMAN. We did in this study.

Mr. QUIE. It didn't sound to me like you related to me that you laid out the goals, socially desirable goals.

Dr. KAUFMAN. Well, for example, I was doing some work in Harrisburg on this priorities commission. We came to an agreement that there were three socially desirable goals for State expenditures. One was to have economic growth, which we were willing to measure by per capita income. The other was something called equitable distribution of income. That is, a more equitable distribution of income. The third was to improve the quality of life.

When we interviewed every agency head, we said: "Could you defend the money that is being spent in the achievement of these three goals?" Now, these are three desirable goals at a State level.

Mr. QUIE. Could you say then, taking those three goals, that we could then provide an incentive system to reward schools for their vocational educational work to reach those three goals?

Dr. KAUFMAN. No. Now, I am not recommending those three goals. In fact—

Mr. QUIE. You are looking toward socially desirable goals. If you are going to give incentives, I don't think the Congress can do it now. We need to draw on studies that somebody has made on what is a socially desirable goal.

Now, maybe a socially desirable goal is to have the students in home economics half male and half female, half be male in auto mechanics and half be female. There ought to be some goal.

Dr. KAUFMAN. Congress has said: "Do something for the disadvantaged. Do something for the physically handicapped. Do something for females." I would say this is a reflection of society's—I assume—I am not making my point, am I?

Mr. QUIE. No. It is not very important.

Dr. KAUFMAN. It is not the first time. I have failed in class too. Frequently, I know I have failed when I see blue books.

Mrs. CHISHOLM. We are going to have to put some restrictions on time. We have two more panels here this morning. Some of these individuals came from quite a distance to testify, so we are going to try to see if we can establish some time framework.

It is almost 11 o'clock. We want to give the other members on the committee an opportunity to ask you questions, so please if you will, make your answers as brief as possible. Then we will bet to the other two panels and allow approximately one-half hour to each panel. In terms of your presentations, if you can condense them to about 15 minutes, then we will give the members an opportunity to ask you questions.

The question of time is always a problem. Those of you who are used to coming to the Hill understand that, I'm sure.

Representative Miller.

Mr. MILLER. Thank you, Madam Chairperson. Dr. Kaufman, I have a couple of questions. First of all, regarding the criteria that you used for your study to find a school that had a program that had

at least five females enrolled in a nontraditional program offered for females, in your statement you say that the number 5 was picked because you were looking for a figure which would apply to all schools, and you came up with 10? I don't quite understand whether you searched and you only found 10 or you simply selected 10.

Dr. KAUFMAN. The answer is that we had a great deal of difficulty finding 10.

Mr. MILLER. OK. In the years that we have asked States to come up with State plans to address themselves to this problem, those plans have been an utter failure. Is that a fair summery, if you can only find 10 schools in the whole country that have five or more females enrolled in nontraditional female programs in vocational education?

Dr. KAUFMAN. That is the conclusion one could come to. Yes.

Mr. MILLER. Let us move up the ladder. Where is the department of education in its review of State plans? Do you feel qualified to answer that? I assume these State plans are submitted prior to receiving of money. Yet, the State plan doesn't address itself to the problem or at least hasn't effectively. It may in the rhetoric. All the rhetoric is there, but the implementation is gone or the attempted implementation is not there, so we in a sense have been providing funding—and again I am speaking to a conclusion, and correct me if I am wrong—we have been providing funding for programs that are contrary to existing law.

Dr. KAUFMAN. I have never had an opportunity to review State plans, but I did state earlier that I have found over the years in all areas, whether it is in higher education, academic education, whether it is the employment service, whether it is in corrections where we have done studies, most of the people don't understand what a plan is or ought to be.

I think I said that the only thing they know how to plan is 10 percent more than last year. I got into trouble with our local superintendent once by writing a very nasty letter because he developed a 10-year plan, and what it was, was a projection of enrollment, and I wrote a long letter, a nasty letter, saying: "That is not a plan."

Mr. MILLER. I was afraid that might be your answer because I must say that this isn't the only area that I have come across in the last couple of weeks where State plans have been absolutely out of compliance with what this Congress has asked the States to do.

When you talk about programs that involve hundreds of millions of dollars and there is no compliance, I am a little bit disappointed. If the statements on page 18 of your statement are correct, if you talk about providing incentives—I mean, I don't think these people can deal with an incentive in terms of coming up with a plan.

Maybe we ought to talk about penalties, which is what usually happens to you when you violate the law, and perhaps knowingly violate the law perhaps not the first year, but the second, third, and fourth years.

I think, you know, we have really got to take some serious action. Otherwise, this Congress might as well fold up because somebody is writing the regulations and apparently the law does not direct regulations to be tight enough to direct the States to come up with a tight enough State plan. Yet, we come back and just allow for infla-

tion and give more money on the basis that somehow the job is being done when there is no evidence.

The hearings that Mrs. Chisholm held prior, the first hearings, were devastating, not just in vocational education, but women in the work force. Now you come down to the program that is supposed to provide an avenue or help provide an avenue, and the evidence is just as devastating, that we have not met the needs of those people.

Let me ask you a question. You mentioned one of the kind of enlightening things you saw in one program was the fact that those few females who made the unusual effort to get into these programs—it appears also, I might add, that your study concludes that it was the initiative of the females, not of the educational program, that got them into the program. They decided they were going to take auto shop or carpentry or whatever the nontraditional—

Dr. KAUFMAN. To a large extent.

Mr. MILLER. Since the educational system to date seems to have demonstrated an inability to provide either the incentive, the knowledge, the wherewithal, for females to cross over, and programs to have an outreach for females in these areas, what if you were to provide money to, let us say, State commissions on the status of women, to have independent groups come in and counsel young women at the junior high level or at the high school level. These counselors could let them know what is available in the way of alternatives, that these aren't really nontraditional any more. Today they are not traditional in their counselors' eyes because their counselors have been counseling that way for 25 years. Let the young women know that the government—I come back to my old argument—that the Government is providing penalties to employers who fail to hire women, who don't go out and match the community makeup, and yet the educational system is doing nothing to deal with it.

Is there a role for an independent party, not trying to retrain in-service counselors, but simply raising the awareness of the men and women involved, the young women in secondary and postsecondary schools?

Dr. KAUFMAN. I would like to see States try anything or even let them fail, but let them try new devices. I think the beauty could be that different States might try different things.

We thought when we originally asked for these funds for this particular study, we thought we would find at least, well, we started off with 15, but we did 10 because we got cut back a little in money because of allocation of funds among the States.

That had to be done. I don't say this in any criticism. We thought, we even proposed we would write handbooks. We thought we were going to find successful programs, where they overcame all of these obstacles, all of these constraints and whatnot.

We knocked out the handbooks since we got cut back. We couldn't write them, but fortunately then, because we hoped to come up with a very constructive report. "Here are 10, 15 schools. This is what they did. This is how they did it." Disseminate it. "You see. It can be done."

Now, we are in the middle of the study. I have no right to draw conclusions. We are going to try to find out what happened to women

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Now, we are in the middle of the study. I have no right to draw conclusions. We are going to try to find out what happened to women

who have graduated from these programs. We are following up with questionnaires.

It would be interesting to find out what jobs they got. Did they get promoted? These are all listed. I think, in my detailed statement.

I must say, however, that right now I am having a great deal of difficulty digesting what I have seen and what others have seen, and we are going to have a grand session on this thing of. Could we write a handbook on how to do this, how to overcome this?

What would be better, instead of my sitting here as an intellectual saying: "This ought to be done and that ought to be done. Spend your money this way and that way." Wouldn't it have been better if we had found schools that had taken strong, specific steps in order to overcome it?

Now, we found in some of these places, as I illustrated, sending young girls out into the junior high schools to talk to the youngsters.

Mrs. CRISHOLM. Dr. Kaufman, really I am going to have to cut you off at this point. Representative Buchanan?

Mr. BUCHANAN. Thank you, Madam Chairperson. Dr. Kaufman. I must say I am impressed with your carrot, rather than stick, approach to this problem.

Now, on page 21 of your statement, you point out that the schools are faced with the problem of needing to change attitudes and behavior of various groups in our society, including parents, children, teachers, counselors, school administrators, even State legislators and Members of Congress, I happen to believe that you are exactly correct.

Indeed, you point out in your statement that starting very early in life, in education from parents and early teachers, young women are taught to accept their traditional role in society.

Don't the attitudes which contribute to the end result begin in various places at a very early level of education? That is what you said, isn't it?

Dr. KAUFMAN. Yes.

Mr. BUCHANAN. Then, could it be fair to lay on the schools or the people administering vocational education in a State the whole burden to the extent that we would penalize them for their failure to achieve results for which all society shares blame and which requires a change in attitudes for Members of Congress even?

Would not it be rather unfair to use a stick, rather than the carrot, under these circumstances?

Dr. KAUFMAN. The trouble is, as I think I indicated earlier, that every group says this, and, if every group says this and says: "Other groups also have to do it," then no one does it.

It has got to start somewhere, and I think the schools can work with parents if they want to, in a community sense.

Mr. BUCHANAN. Then would you endorse the idea of penalizing schools for failure to achieve results?

Dr. KAUFMAN. Oh, surely. When I use the word "incentive," I am implying disincentives.

Mr. BUCHANAN. I see. Would you approve the idea of penalties without rewards? In other words, we get you if you don't. If you do, you get your money?

Dr. KAUFMAN. Well, it is not a question of: "Did you try? What efforts did you make? What problems did you encounter?" Assist them in trying to achieve goals. Maybe the best thing you can do is reward the school superintendent an extra \$1,000 a year. That might be the best incentive to achieve a particular goal.

We need, I really think, very, very strong incentives that we must provide in the public sector which are the equivalent of what we find in the private sector. I don't know of any equivalent in the public sector except incentives as we find in the private sector in terms of profits.

Mr. BUCHANAN. I find it more appealing to have a positive rather than a negative application, and probably more productive as well.

Tell me this. You said they don't know how to plan. One of the reasons they get into this position of the statistics not coming out right and the result not being achieved is because they don't know how to plan.

Who should help them in this respect? Would that be the U.S. Office of Education?

Dr. KAUFMAN. I think so. I think the Office of Education could, and I happen to know it has considered this question of planning all the way down the line, with the help of economists. I might add, if I could be very prejudiced in terms of my own discipline.

Mr. BUCHANAN. I must say, Doctor, the idea of taking funds away from education as a penalty for not achieving something leaves me very cold indeed.

Education—there is no higher priority in this country, and we don't give it nearly the money that we ought to give. It would appear to me that we have been rather good about laying on educators the penalties for failures of all society, so I would hope that you wouldn't be counseling us to spend less on vocational education as a penalty for its failures, rather than in some more positive way trying to get at it.

Dr. KAUFMAN. I am more compassionate than I sound.

Mrs. CHISHOLM. Representative Jeffords?

Mr. JEFFORDS. I have no questions, Madam Chairperson.

Mrs. CHISHOLM. Thank you very much. [Laughter.]

I don't mean it the way it sounds. Thank you for appearing before the committee. Dr. Kaufman.

Now we are going to ask the next panel to come forward. Ms. Holly Knox, the director of the Project on Equal Education Rights; Ms. Clelia Steele, Project on Equal Education Rights; Ms. Lois Schiffer, the Center for Law and Social Policy; Ms. Marcia Greenberger, also from the Center for Law and Social Policy.

We want to thank you very much for appearing before the committee. We do recognize that this is a very important issue to many, many persons, and I just hate to be the person who has to be constantly watching the clock and putting restraints on your time, but I know you understand.

Ms. SCHIFFER. Certainly we do, and we will try to be as brief as possible.

Mrs. CHISHOLM. Without objection, your prepared statement will be inserted into the record.

[Statement referred to follows:]

STATEMENT OF MARCIA GREENBERGER AND LOIS SCHIFFER, WOMEN'S RIGHTS PROJECT  
CENTER FOR LAW AND SOCIAL POLICY

We would like to thank you for the opportunity to testify before you today, and appreciate your invitation to do so. We are attorneys with the Women's Rights Project of the Center for Law and Social Policy, a public interest law firm in Washington. We have been studying federal programs for vocational education, as well as related job-training programs such as the Comprehensive Employment Training Act ("CETA"), 29 U.S.C., § 801 *et seq.*, which includes on-the-job training and apprenticeship programs, and the WIN program, with special focus on the effects of these programs on women and girls. On behalf of client organizations, we have commented on regulations issued pursuant to the Vocational Education Act, and have petitioned federal agencies to institute practices which can help eliminate sex discrimination in vocational training. We are also representing individuals and educational organizations in a lawsuit against the Department of Health, Education and Welfare ("HEW") and the Department of Labor ("DOL") seeking to require those agencies to enforce laws which prohibit sex discrimination in educational institutions.

In our experience, we have repeatedly found that these programs are being run in a sex-discriminatory manner, so that women and girls are channeled into training, and then into jobs, which are traditionally female. They are not encouraged to prepare for and seek jobs in the wide range of occupational categories usually filled by men. It is our understanding that this sex discrimination in vocational education programs has been outlined in detail by other participants in these hearings. We would simply note that the channeling is caused in part by a failure of program administrators, teachers, and counselors to be aware of the discrimination, and by a failure of ancillary counseling and guidance programs to take strong affirmative steps to introduce women to a full range of job possibilities. Also the discrimination may be brought about by a determination on the part of program administrators and instructors that since women are not presently employed in particular occupational fields, training them for those occupations would not be realistic. The result of these failures, whatever their cause, is the circumscribing of opportunities for a major portion of the work force.

SUMMARY OF RECOMMENDATIONS

In our comments today, we would like to focus on procedures which might be adopted to help ameliorate sex discrimination occurring under the Vocational Education Act as it is now being implemented. As set forth below, we make ten recommendations so that the beginning steps toward a non-discriminatory program can be taken: (1) that there be careful coordination with related federal programs dealing with job training and public service employment; (2) that detailed, systematic, and periodic statistics be collected by school/occupational program/by sex/by race, so that a determination can be made of where and when discrimination is occurring; (3) that direct and detailed guidance be given to program administrators, instructors and counselors concerning their duty to detect the existence of discriminatory practices, and to take specific steps to eliminate such discrimination; (4) that detailed reporting requirements be adopted, with provision for frequent reports to the responsible government agencies by the grantee or contractor concerning the operation of the program, the specific steps taken to eliminate sexist biases, and the results of those efforts; (5) that the responsibilities of the governmental agencies overseeing the programs be outlined with timetables for action on the reports received by the grantee or contractor; (6) that fair and adequate grievance procedures with time limits for action are made available by the responsible government agencies so that complaints about discriminatory practices can be promptly and efficiently resolved; (7) that a range of sanctions, including but not limited to fund terminations, is instituted and enforced, so that program administrators, instructors and counselors have a strong incentive to end discrimination in vocational training throughout the country; (8) that there be a specific denomination of persons concerned with improving the vocational education opportunities for women as a category for selecting members of the state vocational education boards; (9) that this Committee conduct periodic oversight hearings to assure that the mandates of the law are being followed, and (10) that the Act specifically provide for a private right of action to enforce the Act.

## COORDINATION OF PROGRAMS

At the outset, it may be helpful to review briefly the wide range of programs which affect virtually every phase of vocational training. These programs, all administered by HEW, are authorized by the Vocational Education Act of 1963, 20 U.S.C. § 1241, *et seq.*:

The Vocational Education Basic Grants to States program (20 U.S.C. § 1261) provides funds to assist state vocational education boards in conducting career training programs for everyone in the state, including the disadvantaged and the handicapped. State Advisory Council Grants (20 U.S.C. § 1244) enable those agencies to develop and administer state plans and evaluate state vocational education programs.

The Consumer and Homemaking Grants Program (20 U.S.C. § 1341) provides money for training programs in consumer education, child care and guidance, improvement of home environment and combining roles as homemaker and wage earner, to be used primarily in economically depressed areas or areas of high unemployment.

Cooperative Education Grant (20 U.S.C. § 1351) help prepare students for employment through work-study arrangements, with priority to areas with high school-dropout rate youth unemployment. Work-study Grants (20 U.S.C. § 1371) provide funds for disadvantaged full-time vocational education students to hold part-time employment with public agencies.

The Special Needs Grants Program (20 U.S.C. §§ 1301 and 1303) provides vocational training for the academically, socio-economically, or otherwise socially handicapped.

Curriculum Development Grants (20 U.S.C. § 1391) provide educational institutions and profit and non-profit groups with funds for curriculum development in new and changing occupations and improvement and dissemination of existing curriculum interests, and Vocational Education Research Grants (20 U.S.C. § 1251) provide funds for research and pilot projects and information dissemination.

Innovation Grants (20 U.S.C. §§ 1501 and 1503) are used to develop, establish and operate model occupational education programs which must include intensive guidance and counseling.

In addition, two related programs are initiated by the Higher Education Act of 1965, 20 U.S.C. § 1119c-1. These are the Personnel Development Awards Program, which makes grants available to institutions which offer graduate study to experienced vocational educators; and the Professional Personnel Development Program which pays the cost of cooperative arrangements between state vocational education boards and institutions of higher education, local education agencies or private business.

In no case do the regulations implementing this broad range of programs specify in detail steps which can be taken by program administrators, educators and counselors to eliminate sex-discrimination. This lack of direction has served to sanction the widespread discrimination which now exists.

And most significantly, the attention now being given to the Comprehensive Employment and Training Act of 1973, 29 U.S.C. § 501 *et seq.*, which provides for job training and public service employment, does not appear to have focused adequately on its relationship to vocational education programs, nor those programs' combined effect on women. The support for expanded public service employment should be regarded as providing an opportunity for a meaningful, coordinated federally-funded approach that would offer needed vocational training linked to jobs, not only in the private sector, but the public sector as well. The training and jobs should have as their focus the skills that will be in demand in the future. In addition, they could provide an excellent mechanism for placing girls and women in jobs with career potential from which they have been traditionally excluded.

The present regulations under the State Vocational Education Programs, and in particular § 102.40 do at least state that there should be cooperative arrangements with the state public service employment system. However, there is little guidance provided as to how the cooperation should be effectuated. Nor is there any specific regulation concerning the problem of sex discrimination.

However, not only is careful coordination with other programs necessary, but also further steps must be taken that are specifically directed at the elimination of sex discrimination in the vocational education programs themselves.

## ADEQUATE STATISTICAL GATHERING

HEW and the Office of Management and Budget ("OMB") should be required to collect systematically statistics on "participation in vocational education programs by occupational program/by school/by sex/by race.

HEW is now under legal obligation to identify the schools, including schools providing vocational training, which receive federal funding by grant, contract, or loan that are discriminating on the basis of sex, and to discontinue federal funding to those schools. See, e.g., Title IX of the Education Amendments Act of 1972; Executive Orders 11246 and 11375; Titles VII and VIII of the Public Health Service Act of 1971, and General Provision for Programs regulations implementing the General Education Provisions Act ("GEPA"), 45 C.F.R. 100b.262(b). HEW cannot enforce those obligations if it has no specific statistics indicating the compliance with those laws by each school receiving federal funds.

A continued failure by HEW to enforce the laws with regard to each school by failing to secure information concerning their compliance violates the legal obligations of HEW. See *Adams v. Richardson*, 480 F.2d 1159 (D.C. Cir. 1973); *Legal Aid Society of Alameda County v. Brennan*, 381 F. Supp. 125 (N.D. Calif. 1974).

It is our understanding that through fiscal year 1972, HEW did collect detailed data regarding sex discrimination in each school. However, since that year statistical gathering on a sampling basis was considered so "successful," that full data collection was no longer considered to be necessary.

A review of the book based on that sampling program, *Vocational Education: Characteristics of Students and Staff, 1972*, written by the National Center for Educational Statistics, reveals the procedure's limitations. It provides no means for determining whether there are sex-discriminatory practices in a particular school. Such a determination is of interest to students who may seek to enforce their rights for admission to vocational education programs, to employers who may want to know where they can find qualified employees, and to groups who generally seek to improve educational and employment opportunities available to women and minorities.

Because of the importance of detailed statistics for adequate enforcement of laws prohibiting sex discrimination, we have petitioned OMB and HEW, on behalf of several groups, to reinstitute the collection of such statistics. That petition has been supported by such organizations as the AFL-CIO.

This Committee should direct resumption of regular data collection. Without such data, programs to eliminate discrimination cannot be effectively enforced.

## DETAILED GUIDANCE ON STEPS TO ELIMINATE SEX-DISCRIMINATION

A further failure of vocational education programs as presently administered is that laws and regulations do not set forth specific and detailed means by which administrators, instructors and counselors can avoid discrimination. None of the regulations for the programs which we have outlined above gives concrete guidance on steps to eliminate sex discrimination. The only regulation regarding sex discrimination for these programs is a general prohibition: "Federal financial assistance is also subject to the provision of Title IX of the Education Amendments of 1972 (prohibition of sex discrimination) and any regulations issued thereunder." 45 C.F.R. § 100b.262(b).<sup>1</sup>

Guidance counselors reading that regulation are not put on notice that they should actively counsel women about non-traditional jobs. Nor are the job-placement officers made aware that they should be working with local employers to assure that jobs are provided on a non-sex-biased basis to program graduates.

On behalf of several organizations concerned with securing equal educational rights for women, we filed a Comment with HEW to suggest that they amend the Vocational Education Regulations for State Plans (45 C.F.R. Part 102).

<sup>1</sup> The prescription in CEFA is worded in a different fashion, but suffers from the same generality.

<sup>2</sup> No person in the United States shall on the ground of race, color, national origin or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this chapter." 29 U.S.C. § 991. See also 29 U.S.C. §§ 983(1); 943(f), and 29 C.F.R. Parts 94.95, 96, 98.

The sole exception is the subchapter dealing with Job Corps, which provides a numerical goal for women enrollees. 29 U.S.C. § 927(b).

covering most of the programs we have described above, to provide specific prohibitions against discrimination and affirmative steps for its elimination. For example, we suggested that the regulation setting forth standards for programs of instruction be modified to require that the programs be administered without regard to sex and that they be designed to omit material which is sex-biased and not directly job-related. Such specificity would provide meaningful guidance for action to educators and administrators.

The Vocational Education Division of HEW agreed that such specificity would be helpful in eliminating sex discrimination in vocational educational programs. However, in consultation with the general counsel's office of the Department, it determined that the general prohibition against discrimination set forth at 45 C.F.R. § 100b.262(b) would provide sufficient formal guidance, and accordingly did not amend the state plan regulations to include more detailed and specific guidelines. The Division did send to directors of state programs and state boards of vocational education a copy of our suggested changes with a letter indicating that the suggestions were helpful as a means of eliminating discriminatory practices.

However, such informal guidance does not provide the sort of systematic, formal supervision with the force of possible sanctions which is necessary to eliminate sex discrimination. Without specific legislative directives, the detail necessary to have an effective regulatory mechanism will not be provided. Nor can this committee rely on legislation such as Title IX to provide (no final regulations have been issued, although the Act has been in effect almost three years) do not provide detailed guidance for action to each participant in the vocational training process. Therefore, this Committee must provide a means under the Vocational Education Act to assure that the current vocational education laws are administered through detailed directives.

We suggest that Congress specify in this legislation the types of actions which should be taken, and the specific guidance to be given in the regulations. In addition, a date should be set by which time the regulations must be promulgated, so that the sorry delays which have occurred with regard to Title IX will not be repeated.

#### DETAILED REPORTING REQUIREMENTS

It is essential that recipients of federal funds be required to submit detailed reports on a frequent basis (twice yearly) to the responsible governmental agency. It is only through such a reporting mechanism that the government will be able to judge whether its funds are being spent in a nondiscriminatory fashion, and in fact whether the goals of the program are being met.

Beyond the raw statistical data discussed above, the reports should contain such information as the specific steps taken to eliminate sex discrimination. Those steps should be in compliance with guidelines provided in the statute and implementing regulations. In addition, the reports should indicate the degree of success or failure of each step.

The Constitution requires that federal funds not be expended to programs which support discrimination. See, e.g., *Commonwealth of Pennsylvania v. Board of Directors*, 353 U.S. 230, 231 (1957); *Cooper v. Aaron*, 358 U.S. 1, 19 (1958); *Griffin v. County School Board of Prince Edward County*, 377 U.S. 218, 232, (1964); *Green v. Kennedy*, 309 F. Supp. 1127, 1136 (D.C.D.C. 1970). Without this type of reporting requirement, neither the goals of the Act nor the constitutional mandate of non-discrimination can be fulfilled.

#### CLARIFICATION OF GOVERNMENTAL RESPONSIBILITIES

The Act should also make clear the actions to be taken by the governmental agency in implementing the law. In particular, there should be timetables with which the government must comply in reviewing the reports submitted by the fund recipients, and the statistics regarding operation of programs collected under the Act, in making determinations as to compliance with the Act, and in taking appropriate corrective action if such compliance is not found.

Similar guidance should be given regarding the proper handling of complaints under the grievance procedure discussed below. Experience with HEW's handling of complaints under the grievance procedure discussed below. Experience with HEW's handling of complaints under the Executive Order 11246 and Title IX indicate that such guidance is sorely needed.

### PROPER GRIEVANCE PROCEDURES

Provision of fair and adequate grievance procedures for governmental handling of complaints under the Act is essential to implementation of laws designed to eliminate sex discrimination in vocational training programs. Grievance procedures with time limitations to assure prompt treatment, fair opportunity for notice and hearing so that all views may be aired, and non-biased decision-makers, provide an efficient mechanism for redressing discrimination. Without such procedures, those discriminated against can seek relief only through the time-consuming and expensive method of court suit.

Moreover, an adequate governmental grievance mechanism can help assure that problems are resolved before positions are hardened and strong adversity develops. If such procedures provide protection against any retaliation for seeking redress of grievances, they can help substantially to eliminate discriminatory practices. We strongly caution this Committee, however, not to provide open-ended procedures which allow the opportunity for delay without remedy.

### A RANGE OF SANCTIONS

Because discrimination has been so prevalent in vocational training, a stick as well as a carrot is necessary to eliminate unfair treatment. Therefore, we recommend that this committee outline a range of sanctions, including but not limited to cutting off federal funds to school departments, schools, school districts, and state vocational education boards, which do not eliminate sex discrimination in vocational training programs. It might also be desirable to provide for civil penalties, or a return of funds spent in a discriminatory fashion.

As discussed below, oversight hearings can assure that sanctions are used quickly and consistently when required to assure compliance. For without enforceable and enforced sanctions, vocational training program administrators, educators and counselors may with impunity take a lax attitude toward the remedy of discrimination. The interest of this Committee in eliminating such discrimination, as manifested by these hearings, should lead it to a continuing supervision of remedy in this area.

### EXPANDED VOCATIONAL EDUCATION BOARDS

The Act in its present form presents a fairly detailed list of categories of persons to be represented on state vocational education boards. However, there is no category which reflects a concern for the special problems of women. In fact, in response to our Comment on the State Plan Regulations, DHEW stated that it could not add such a category without statutory authorization. 40 Fed. Reg. 8076 (Feb. 23, 1975). We therefore suggest that a category be added of persons who have special knowledge, experience and understanding of the need for improving the vocational education opportunities of women. In addition we would suggest that appropriate groups and organizations, such as state Commissions on the Status of Women, be consulted about candidates for these Boards.

### OVERSIGHT HEARINGS

Periodic oversight hearings for reviewing regulatory procedures should be held, and include a review of the success of HEW in enforcing laws to eliminate sex discrimination in vocational training programs, and a review of whether discrimination is in fact being eliminated. Without such oversight, federal agencies do not seem actively to protect the interests of women and minorities in these or other federal programs. As a result of failures to enforce anti-discrimination provisions, several lawsuits have been brought against HEW to compel enforcement. See, e.g., *Adams v. Richardson*, 480 F.2d 1159 (D.C. Cir. 1973); *Women's Equity Action League v. Weinberger*, Civ. Action No. 74-1720 (D.D.C.) (now pending); see also *Legal Aid Society of Alameda County v. Brannan*, 381 F. Supp. 125 (N.D. Calif. 1974) (concerned with other agencies). Oversight hearings could help eliminate the need for such lawsuits by providing a more effective and efficient impetus for enforcement to HEW and other enforcement agencies.

## PRIVATE RIGHT OF ACTION

Given the vital importance of vocational education to our nation, as well as to the individual citizens who receive its benefits directly, it is necessary to provide expressly for the most effective means possible to assure full implementation of the Act. As discussed above, congressional oversight hearings are important. However, there should also be a clear and broad private right of action provided, so that individual citizens are made aware that they can enlist the aid of courts if the Act is not properly enforced.

The effectiveness of the private right of action can be seen clearly in Title VII of the 1964 Civil Rights Act. Under that Title, countless numbers of individuals have brought suits which have led to the elimination of illegal employer practices.

This mechanism has also been adopted in the Federal Water Pollution Control Act Amendments of 1972. We recommend the language of that Act to the Committee:

"(a) \* \* \* [A]ny citizen may commence a civil action on his own behalf—

"(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of (A) . . . [the Act] or (B) an order issued by the [Secretary] or a State with respect to [the Act], or

"(2) against the [Secretary] where there is alleged a failure of the [Secretary] to perform any act or duty under this chapter which is not discretionary with the [Secretary].

"The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce [the Act or orders], or to order the [Secretary] to perform such act or duty, as the case may be, and to apply [any appropriate sections] of this title." 33 U.S.C. § 1365(a).

"(g) For the purposes of this section the term 'citizen' means a person or persons having an interest which is or may be adversely affected." 33 U.S.C. § 1365(g).

## CONCLUSION

There is no dispute that serious sex discrimination pervades the vocational education programs as they are now being administered. Only through decisive and strong steps can these sex biases be removed. We hope that our recommendations will be useful to the Committee in its consideration of the proper action to be taken in solving this serious problem.

**STATEMENTS OF HOLLY KNOX, DIRECTOR, PROJECT ON EQUAL EDUCATION RIGHTS; CLELIA STEELE, PROJECT ON EQUAL EDUCATION RIGHTS; LOIS SCHIFFER, CENTER FOR LAW AND SOCIAL POLICY; AND MARCIA GREENBERGER, CENTER FOR LAW AND SOCIAL POLICY**

Ms. SCHIFFER. I am Lois Schiffer, and with me, to my right, is Marcia Greenberger. We are attorneys with the Women's Rights Project of the Center for Law and Social Policy, a public interest law firm in Washington, which has been concerned a great deal with the problem of equal rights in the field of education.

Ms. Greenberger and I have made 10 recommendations for ways in which the Vocational Education Act should be modified in order to deal with the problems of sex discrimination with which this committee is now familiar in the field of vocational education.

They are set forth in fairly great detail in our written statement, and we will simply summarize them as quickly as possible here. I shall address the recommendations for specific actions to help eliminate sex discrimination, and Ms. Greenberger will address the five recommendations for providing appropriate enforcement mechanisms in the legislation.

Representative Miller, we would note that we share a great number of your concerns about the problems of implementation, and we hope that the recommendations that we make will go some way toward addressing those concerns.

Regarding steps for specific actions which can be taken to alleviate sex discrimination, we have five recommendations. First, that there be a provision in the act for general coordination between vocational education programs and other federally funded training and employment programs, to help eliminate sex discrimination and sex role stereotyping.

Second, that State vocational education boards be specifically required to include persons having special knowledge about vocational training problems for women.

Third, that the Department of Health, Education, and Welfare regulations and the statute make specific and detailed provisions for steps to help eliminate sex discrimination, which must be taken by program administrators, teachers, counsellors, and others involved in the implementation of these programs.

Fourth, that recipients of vocational education funds submit detailed and frequent reports regarding the steps they have taken to eliminate sex discrimination to the relevant agency.

Fifth, that statistics on program participation be collected by occupation course, by school, by sex, by race, so that review can be made of the effectiveness of the steps which are being taken to eliminate sex discrimination.

First, regarding coordination of programs to help eliminate sex discrimination, as this committee is fully aware, the Vocational Education Act covers a wide range of programs in the vocational education area.

In addition, programs are administered under the Higher Education Act of 1965 involving training of vocational teachers. In no case do the regulations implementing this broad range of programs made detailed and specific recommendations about steps which can be taken by program administrators, educators, and counsellors to eliminate sex discrimination, nor, with one very general exception, do they make any mention of other provisions such as the CETA Act, Public Service Employment Acts, and Public Works Employment Act, which also contribute to training and job placement and which can be very effectively and meaningfully used to help eliminate sex discrimination.

What we would suggest is that the Vocational Education Act be modified to specifically provide for detailed coordination among all of these programs with an eye toward helping to expand the role that women can play in the employment market.

We would emphasize that the Act should look toward longterm employment prospects and particularly that it should look toward developing employment prospects in the private market, not simply the public employment marketplace.

The ways in which we suggest this be done is by stressing that training be linked to jobs which seem to become available and that public service and public works jobs be made available as a further kind of training ground and preparation in an expanded number of vocational roles for women.

We would also see this as a two-way process so that women—so that jobs can be developed which would take into account the training that women have been given and, would encourage them through giving them employment first in CETA jobs and jobs funded through other Federal programs, to see that they can work in non-traditional areas which then have a good opportunity for placing them in the market,—private market some time in the future.

We would also suggest that these jobs be used as a place that women can go and girls can go to for the present until more private jobs are developed in the fields where they will begin to become trained.

In addition to this coordination among all of these programs, we would suggest that the coordination also be provided for new statutes, new laws which may be passed, providing for other kinds of special employment projects during this current recession.

Our second recommendation regards the State vocational education boards. The present Vocational Education statute provides a number of very specific categories from which people on these boards must be drawn.

However, none of these people needs to be concerned with the special problems of women. We have commented on DHEW regulations that categories be expanded, and DHEW has responded that they cannot do it without additional statutory authorization.

We would, therefore, recommend that the statute specifically provide that these boards include persons who have special knowledge, experience, and understanding of the need for improving the vocational educational opportunities for women.

We would also suggest in finding these people that State boards might want to consult with State commissions on the status of women or other similar organizations.

Our third recommendation involves detailed guidance which should be given through regulations and the act to state vocational boards, to administrators, to teachers, and to counsellors on steps which they can take to eliminate sex discrimination.

Representative Miller, as you have already recognized, one of the problems is that guidance is given in a very general, fuzzy way, which means that nobody follows it at all, and what needs to be done is that people who are in positions to be making decisions which affect the participation of girls and women in these programs be told in quite specific terms what steps they can take to advance the opportunities for girls and women.

The present law and the regulations implementing them have only a single general provision saying that the Vocational Education Act is subject to the provisions of title IX. We would submit that that does not in any way give the kind of detailed guidance that is required to the people who are implementing the Act.

We again commented to the Department of Health, Education, and Welfare that they should expand the present regulations to give this kind of detailed guidance, and, although they were quite sympathetic and felt that in fact such detailed guidance would be helpful, the advice of the General Counsel's Office of DHEW was that the general provision was adequate and that cluttering up the regulations really wasn't in the interests of advancing a program.

We feel that this is just misguided and, therefore, feel that, since DHEW is not willing to take formal actions, although they were willing to take such informal actions as sending our recommendations to the local boards, that the statute must specify that detailed regulations are required.

We think there is no other means by which the broad range of people who are involved with implementation of the Act and the programs under the Act can know what steps they must take.

This detailed guidance, for instance, should provide that guidance counselors must counsel girls and women and men, for that matter, on the full range of jobs, that job placement people must look to the community to find nontraditional jobs for women.

Our fourth recommendation is that, once these new and better programs are in effect, that detailed reporting requirements be placed on the schools so that they can inform the relevant agency, most likely DHEW, of what actions they are taking to eliminate sex discrimination and whether those actions have been successful or not.

They should make these reports on a frequent, periodic basis so that continuing review can be had of whether the actions are successful and in fact focusing attention on sex discrimination.

I would also note that I think reporting is particularly important because often, when you have to review your own program in order to make a report, it leads you to make changes in the program to conform it more fully to the legal requirements which are imposed on that program.

The Supreme Court has consistently recognized that Federal money is not to be expended in a discriminatory manner or in programs which discriminate, and only by implementation of such a reporting requirement can this Congress be aware of whether those constitutional mandates have been met.

The fifth recommendation is that the local schools be required to provide DHEW, and the Office of Management and Budget be required to collect detailed statistics by occupational program, by school, by sex, by race, and it has been suggested to me also by national origin, on who is participating and continuing to participate in different vocational educational programs.

HEW is now under a legal obligation under a variety of laws to identify the schools which provide vocational training which are not doing it in a nondiscriminatory fashion. HEW simply cannot enforce its obligations under those laws, and we would suggest under the regulations which are implemented, the Vocational Education Act, unless it knows by schools just what the school is doing.

HEW collected such statistics through fiscal year 1972, at which time it stopped the collection of such statistics because it instituted a sampling procedure which it felt was adequate. The sampling procedure is not adequate. It gives no indication by school what is going on. It gives no means for enforcing the laws prohibiting sex discrimination.

We, on behalf of a number of groups which are concerned about this matter, petitioned DHEW and the Office of Management and Budget to recommence collection of these statistics promptly. The response I have received so far have been a variety of different

offices indicating that it is not their responsibility to see that the statistics are collected.

I would suggest that, by putting the obligation in the statute, we will alleviate this sort of buckpassing and make it clear that in some way the statistics must be collected.

Mrs. CHISHOLM. All right.

Ms. GREENBERGER. I was just going to continue with the testimony that we presented that Ms. Schiffer started.

The section that I would like to discuss goes in great part to the question of imposing sanctions on recalcitrant State programs.

We are very sympathetic that enough money is not being spent in the area of vocational education or education in general, and the idea of cutting off funds and penalizing students is not an attractive proposition.

On the other hand, I think that experience has shown that without sanctions in fact we are really penalizing more effectively more students in this country because without sanctions all the laws and all the good intentions on the books do not in fact lead to any kind of adequate implementation of those laws or those policies.

We would first like the governmental responsibilities to be clarified in hopes that with adequate oversight by the governmental agencies the implementation—rather, the imposing of sanctions would not be necessary.

If this committee through legislation would make clear the responsibilities of governmental agencies in view of the statistics which Ms. Schiffer suggested ought to be collected and reviewing the reports that would be submitted on a regular and periodic basis and actively working with State and local governmental agencies on programs of vocational education, hopefully the problem of sanctions would be alleviated to a great degree.

We suggest that specific guidance be given to the governmental agencies that have these responsibilities, and in particular HEW, so that they will be aware of this responsibility.

I think the area of executive orders which have directed HEW to look at the area of private employment and sex discrimination and title IX—DHEW has shown itself to have serious problems in the area of adequate enforcement and adequate oversight, and specific direction by legislation in vocational education is sorely needed.

We would also say that there should be an adequate complaint procedure which would be developed in the act so that individuals who feel that they have been discriminated against on the basis of sex in vocational education programs could bring their problems to the Government agency that has the responsibility for monitoring. Hopefully again, there might be an adequate resolution without a imposition of sanction.

In the area of executive orders, for instance, under title IX, insofar as we have seen the draft guidelines of title IX, there have not been very serious attempts to have an adequate grievance procedure or an adequate complaint procedure where individuals have a right to notice, have a right to participate, have a right to appeal through the Government process, have a right to present their case, so that there can be meaningful resolution of the sex discriminatory problems, and obviously it is one of the best ways of bringing to the

attention of the Federal Government the kinds of problems that individual women and girls are suffering from.

Finally, we do come to the question of sanction. We think that, as a practical matter, if the Federal Government is going to have any kind of meaningful oversight responsibility, it has got to have a stick as well as a carrot.

Simply saying that there should not be sex discrimination, without adequate remedy in the case of a showing of that sex discrimination, means that the initial order will have no effect, and, in fact, given the legal responsibility that Ms. Schiffer discussed on the part of the Federal Government, we think that it is a legal matter.

The Federal Government simply cannot sanction the granting of funds to programs that do have sex discriminatory components to them, and we would urge that there be meaningful and useful sanctions provided.

I think one of the problems with the executive orders, for instance, and title IX is the fact that there might not be enough different types of sanctions that could be invoked in the case of sex discrimination.

An all-out cutoff of funds to every program in the future may be a bit harsh, depending on the type of sex discrimination which is at issue, and we do suggest, therefore, that a whole wide range of sanctions be available to the governmental agency which is reviewing vocational education programs, so that they can select an adequate and appropriate sanction which would not penalize students wrongly, but in effect would serve as an incentive to the vocational education program.

We would suggest, for instance, that there should be an ability to cut off Federal funds through departments and not only just an overall school, and it might also consider a provision for return of funds if they have been spent in a discriminatory manner, as a way of pinpointing who it is that is to blame and who it is that should be returning their funds, and limiting the sanction in that regard.

We would also suggest perhaps civil penalties might be appropriate as another possible sanction.

Finally, we would like to discuss the question of oversight hearings of this committee in coordination with the oversight hearings of private right to action in the vocational education statute.

We think that in the experience of title IX, for instance, and the enforcement of title IX that we have witness to date, the oversight hearings which the committee could hold would be of great importance in prodding recalcitrant governmental agencies to do the kind of job that it is required to do in enforcing the law.

We also think that it would be quite useful to expressly provide for private right of action so there is no question that individuals who feel that they have been discriminated against in receiving benefits in vocational education programs can present their grievances to a court and have these grievances litigated and adjudicated against a specific State agency or particular education institution, the institution that receives the Federal funds. In that way, I would think a wide range of sanctions would be valuable.

Obviously, private party action has been the most effective action under title VII, and we think it could be appropriate for vocational education sanction as well.

Mrs. CHISHOLM. Thank you very much. Ms. Knox? Without objection your prepared statement will be made a part of the record at this point.

[Prepared statement referred to follows:]

PREPARED STATEMENT OF HOLLY KNOX, DIRECTOR OF THE PROJECT ON EQUAL EDUCATION RIGHTS.

Good morning. We appreciate your invitation to testify this morning. I am Holly Knox, Director of the Project on Equal Education Rights (PEER), and with me is Clelia Steele of the PEER staff.

PEER is monitoring enforcement progress under the Federal laws barring sex discrimination in education, chiefly Title IX of the Education Amendments of 1972. Before coming to PEER, I served for several years as a legislative specialist at the Department of Health, Education and Welfare, both for the Office of Education and the Assistant Secretary for Education. In 1972, I chaired the Commissioner's Task Force on the Impact of Office of Education Programs on Women, which examined the extent of discrimination against girls and women in OE's education programs. I have recently been nominated to the President's Advisory Council on Women's Educational Programs.

Sex bias in vocational education is a serious problem with implications not just for women but for the economic welfare of the nation. The attention which the Subcommittee is serving to bring to this issue will help greatly to impress its urgency on the public mind.

Many myths surround working women. Popular wisdom has it that most women stay at home but if they do work outside the home, it is only when their children are grown or when they work for "extra" money—little added luxuries.

This simply is not so. Today more and more women are working. More and more of them are working because they must. The most startling change in women's participation in the work force has been among women with young children—the number of women-workers with children under six has increased 169% since 1950. Women workers with children 6-17 have increased by 64%, and those with no children under 18 have increased 45.5%.

The reason for this dramatic increase is simple. Most of these women are working because they and their families need their income to survive. As other witnesses have already told the Subcommittee, a sizable proportion of all women workers are single, widowed, divorced or have husbands earnings less than \$7,000 a year.

Based on current trends and future projections, it is clear that the young woman in high school today can expect to spend most of her adult life working outside the home. There is strong evidence that women's participation in the labor market will continue to grow.

For the short term, inflation and changing economic conditions will force even more women into the work force to support themselves and their families.

Over the long term, several other factors come into play. Since women's working patterns have historically shifted with family size, we can expect women's labor participation rates to rise as the average family size continues to drop. At the current fertility rate women now of child-bearing age will average 1.8 children. The lowest previous rate in the U.S. was 2.2 children during the worst of the Depression of the 1930's.

In addition, given the rising divorce rate, a young woman's chances of becoming a head of household—sole support of her family—are greater than ever before. Department of Labor statistics (1972) report a 56% increase in the number of women heads of households from 1960 to 1972.

Again, these women will be working for survival. When a woman is responsible for the support of a family, she's not working for extras. She's working to put food on the table and clothes on her children.

The challenge to vocational education today is to meet the developing needs of today's young women and the needs of the labor market. It is doing neither adequately.

The Committee has heard extensive testimony from Dr. Marilyn Steele, Dr. JoAnn Steiger and others of the major inequities confronting young women in vocational education today. Rather than repeat that testimony, we will simply say that it's clear that sex discrimination is one of vocational education's more serious current problems.

Mrs. CHISHOLM. Thank you very much. Ms. Knox? Without objection your prepared statement will be made a part of the record at this point.

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Based on current trends and future projections, it is clear that the young woman in high school today can expect to spend most of her adult life working outside the home. There is strong evidence that women's participation in the labor market will continue to grow.

For the short term, inflation and changing economic conditions will force even more women into the work force to support themselves and their families.

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The Committee has heard extensive testimony from Dr. Marilyn Steele, Dr. JoAnn Steiger and others of the major inequities confronting young women in vocational education today. Rather than repeat that testimony, we will simply say that it's clear that sex discrimination is one of vocational education's more serious current problems.

## TITLE IX ENFORCEMENT AND VOCATIONAL EDUCATION

Ending sex discrimination in vocational education is no longer just a matter of gallantry. As you know, sex discrimination in vocational education has been illegal since 1972. Title IX of the Education Amendments of 1972 guarantees that:

"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

However, on the basis of HEW's current enforcement record under Title IX, we strongly urge the Subcommittee not to look to that law as its only lever for ending sex bias in vocational education programs.

In the nearly three years since Title IX has passed, HEW has fallen far short of its responsibility to enforce that law. The Department's activities have been inadequate in several respects:

- its failure after almost three years to issue a final regulation,
- its failure to enforce the law's clear-cut, unambiguous provisions energetically in the meantime,
- inadequate notice to school administrators, data collection, and staff training,
- evidence that Title IX is low priority among HEW's enforcement concerns.

A clear and comprehensive regulation spelling out the equal opportunity responsibilities of institutions receiving Federal education aid is the cornerstone of an effective enforcement program. In areas of education where the implications of a law on sex discrimination raise controversy or complicated problems, a regulation interpreting the broad anti-bias law is essential for guidance to school administrators who must comply and agency staff charged with enforcement responsibilities.

Yet HEW took two full years to issue a proposed Title IX regulation. Even in the best of circumstances, a final regulation cannot possibly take effect before summer—too late for an impact on plans for the next school year. The delay, which the U.S. Civil Rights Commission recently stated has "effectively nullified the intent of Congress in enacting Title IX," is inexcusable.

In the meantime, despite a backlog of complaints, HEW is using its own failure to issue a regulation to justify inaction on complaints of all kinds. A look at the complaint log at the office for Civil Rights shows that, time and again, regional enforcement staff explain their failure to resolve Title IX complaints by "lack of guidelines."

Some aspects of Title IX, such as some of the athletics provisions, do involve controversial and complex enforcement questions which may justify waiting for a final regulation. On the other hand, HEW should be moving vigorously ahead to enforce the three-year-old law in education areas such as vocational education, where there is no ambiguity about the meaning of the law. Title IX clearly bars sex bias in all aspects of vocational education, from counseling to admissions to treatment of students once they are in a training program.

One of the most dramatic examples of HEW's failure to enforce clear provisions of the law has been its failure to act against single sex vocational education schools—which are explicitly forbidden by the statute. An HEW civil rights survey of vocational schools done last year identified 17 single sex schools. Under the law, these institutions have until 1979 to desegregate if they are carrying out a plan approved by the Commissioner of Education.

According to HEW's own guide for civil rights enforcement in area vocational schools,

A single sex institution is in noncompliance *right now* if it is not eliminating admissions barriers according to plan. And according to Title IX, the plan *was* to have been submitted and approved by June 24, 1973. So far no plans have been approved. Kentucky submitted some but they are unacceptable. Massachusetts and New York have the best of intentions and the District of Columbia is actually working on one. But that is the extent of it."

This indictment of the Office for Civil Rights' (OCR) lackadaisical enforcement effort comes from its own report.

Particularly in the case of vocational education institutions, HEW has also failed to give institutions covered by Title IX adequate notice of their rights and responsibilities under the law. The Department still declines to ask institutions to submit an assurance that they will comply with Title IX—again citing the absence of a regulation—an action which would at least let these institutions know they are covered by the statute.

To this day, HEW has not directly notified vocational institutions that they are subject to Title IX. In May, 1973, nearly a year after Title IX took effect, the Department sent a memorandum on Title IX to chief state school officers, urging them to pass it on to vocational schools within the state. Since the memorandum also explained that single sex institutions could have up to six years to desegregate but only if they submitted an acceptable plan by June 24, 1973, this belated and indirect attempt to notify institutions scarcely constituted adequate notice. While OCR did send the memorandum directly to some 50 vocational schools they knew were single sex, there is no telling how many other single sex schools were missed, or how many vocational schools in general ever received the Department's memorandum at all.

HEW has also been slow to collect the basic data it needs to pinpoint major Title IX compliance problems. Last year the Department did survey the nation's "specialized" vocational schools and determined that almost all responding schools have potential sex discrimination problems. However, it has yet to collect enrollment data by sex for vocational courses in comprehensive high schools, where most vocational students receive their occupational training.

We are also concerned about the adequacy of enforcement staff training under Title IX. Last year, staff in three regional offices received one day of training to acquaint them with all aspects of sex and race equality compliance under Title IX and Title VI of the Civil Rights Act. For a staff with no experience handling sex bias cases, one training day is not likely to provide the know-how to carry out confidently a sensible, thorough enforcement program for vocational schools.

All in all, there are many indications that the elimination of sex bias in vocational education—or in education generally—is extremely low priority within the Office for Civil Rights. In addition to poor performance involving the regulation, notice, data collection and training, OCR's plans for future Title IX enforcement raise questions about its commitment to carrying out the law. According to one HEW official, as of February, 1975, only 39 vocational education compliance reviews were "in progress, planned, or contemplated." There are over 1500 specialized secondary vocational schools in the nation today.

The 39 schools for whom enforcement action is at least "contemplated" are institutions with potential problems in both sex and race discrimination. These reviews are important, particularly in their potential for helping some of the minority females who bear a double burden of discrimination. However, these compliance plans do not begin to meet the needs of even a sizable fraction of the young women in vocational education.

Perhaps the most distressing sign of its sluggish Title IX enforcement arrangements is OCR's inability or unwillingness to keep accurate and current reports on its own progress. Because of sloppy reporting procedures, OCR's top staff does not itself have a good grasp of the agency's enforcement performance, no less can it provide a proper accounting to Congress and the public. While the agency was forced by court order in 1973 to begin keeping some status reports on civil rights cases, complaint logs are forwarded to headquarters only quarterly. The agency has never produced periodic summary status reports on Title IX cases, even for its own use. Records dating back three years to Title IX's enactment are so disorganized that it would take HEW staff days—if not weeks to find out the status—or even the number—of all Title IX complaints filed since the law was passed.

#### THE VOCATIONAL EDUCATION ACT—ITS POTENTIAL AND ITS PROBLEMS

Given HEW's three-year history of poor performance under Title IX, it is clear that we cannot rely solely on Title IX enforcement to end damaging sex stereotyping in vocational education. Instead, one must look at HEW's other powerful lever for securing equal vocational opportunities for women: over \$550 million in aid under the Vocational Education Act. These programs represent a tremendous potential resources for breaking down the traditional sex barriers in training.

The Vocational Education Act could fund programs which recruit both young men and women for training in non-traditional occupations, offer unbiased counseling, develop tests and curriculum materials aimed at counteracting sex stereotypes in vocational education, and offer research and demonstrations in expanding vocational opportunities for both sexes in non-traditional fields.

Despite this potential, there is evidence that the Vocational Education Act is widely supporting programs which are restricting, rather than expanding, vocational education opportunities for women.

Almost two and a half years ago, an Office of Education task force appointed by the Commissioner to examine the extent of sex bias in Office of Education programs found widespread patterns of sex discrimination in programs funded by the Vocational Education Act. The Task Force, which I chaired as an Office of Education employee, found that "OE programs tend to train women for a much narrower range of occupations than men—occupations which usually promise little pay, poor chances for advancement, and minimal challenge."

The Task Force cited a number of examples of sex-bias in OE-funded vocational programs. Among them were:

14 single-sex projects listed by states as their "best" vocational education projects serving disadvantaged and handicapped students.

An overall 7% male enrollment in consumer and homemaking education programs funded under Part F of the Vocational Education Act.

Sex bias in career education curriculum materials.

Award to women of only 13% of the vocational education fellowships under Part F of the Education Professions Development Act (women were over 40% of secondary vocational education teachers).

As recently as this December, the General Accounting Office reported similar findings of sex bias in OE-funded programs. GAO found that men and women are clustered in training programs for different occupations and reported practices GAO found were "discouraging deviation from traditional roles," including catalogues using the pronoun "he" for traditionally male training programs and "she" for traditionally female training programs and instances where the physical location of vocational schools is encouraging sex-segregated vocational programs.

It is impossible to know for certain whether the last three years have brought any changes in the distribution of the sexes in vocational education training because, of OE's decision to stop collecting vocational education data by sex and race in 1972. However, there is no reason to believe that these patterns have changed appreciably, given the absence of Title IX enforcement and the fact that the vocational education community itself still appears largely unaware of the human costs of sex-stereotyped vocational programs.

One can safely assume, then, the programs funded under the Vocational Education Act today are in general part of the problem, not part of the solution.

#### ASSURING EQUITY IN OE VOCATIONAL EDUCATION PROGRAMS. CURRENT OBSTACLES

Two major obstacles have so far stood in the way of assuring that federally-funded vocational education programs do provide equal opportunities for students of both sexes. First, as you know, the lion's share of vocational education funds go directly to the states, insulating these programs from influence at the national level. Without statutory changes building in accountability at the state level for eliminating sex bias in vocational programs, the Office of Education's capacity to encourage compliance with Title IX is limited.

Second, the Office of Education has failed to exercise the program authority it does have in several important ways. Looking at the agency's overall response to numerous recommendations made in 1972 by the OE task force appointed to suggest ways to end sex bias in agency programs, it is clear that in recent months the Bureau of Occupational and Adult Education has moved further than most in recent months. I understand Dr. Pierce will be here today to discuss steps he has taken. Dr. Pierce personally deserves credit for taking some steps in an area which has received scant attention from high level OE officials generally.

However, the Office of Education has not taken the necessary steps to tie its vocational education assistance to the recipient's willingness to end illegal sex bias, nor has it moved to identify blatant patterns of discrimination in the programs it funds. Finally, the agency has failed to devote a sizable share of its own discretionary funds to combat sex stereotyping in vocational education.

Let's look at the possibility of tying vocational assistance to the recipient's willingness to provide equal opportunity for both sexes. OE has several tools at its disposal for accomplishing this. OE can require an assurance from applicants that they will comply with Title IX, and it can emphasize the importance

of eliminating sex stereotyping in regulations, guidelines, funding criteria for discretionary grants, and so on. Unfortunately, it has done neither effectively.

OE routinely requires all applicants to submit an assurance that they will comply with the race discrimination ban under Title VI of the Civil Rights Act. Like the Civil Rights Office, though, the agency has yet to add a simple Title IX assurance—again because HEW has not issued a final regulation.

Nor has the agency included language emphasizing the need for each project to eliminate sex stereotyping in its vocational education guidelines and program announcements, or in funding criteria for discretionary funds. OE officials maintain this is unnecessary since the agency's General Provision Regulation, which contains all the boilerplate requirements covering all OE programs, says grantees are subject to Title IX. From my own experience at the Office of Education, I would suggest that the likelihood that OE grantees even read this small notice in 83 pages of fine print, no less feel their funding is contingent on compliance, is slim.

If the agency wants action, it will have to make it clear in every program guideline, request for proposals, application notice, and so on—that funds will only be available to those institutions which are willing to make a commitment in advance to ensuring equal opportunity for both sexes.

As a final piece of evidence that the Office of Education has not gotten a message across to its grantees that the agency insists on equal opportunity for the sexes, I should mention one of the agency's major publications on career education, "Career Education: How to Do It, Creative Approaches by Local Practitioners," published last October, contains 239 suggestions on setting up career education programs. Only one deals with the problem of sex stereotyping. At least one appears to guarantee sex stereotyping—one item suggests using the membership of a "business-labor-industry" organization which excludes women (Rotary) to provide career-role models for students. This approach can be damaging to career aspirations of female students and it is probably illegal under Title IX. I might add that this same OE document features a front-page notice that federal programs must comply with the Civil Rights Act prohibition against discrimination based on race, color or national origin—and not a word about Title IX and discrimination based on sex.

The agency also appears to have avoided a systematic effort to identify blatant patterns of sex bias in its vocational education programs. The Subcommittee has already heard about OE's decision in 1972 to stop collecting vocational education enrollment data by sex and race. In addition, program officials have postponed action on the 1972 OE Task Force's recommendation that when OE staff does vocational education on-site reviews, they include some simple checks for obvious patterns of sex bias. Once again, the rationale is the lack of a final Title IX regulation. Surely the agency does not need a final regulation to recognize its responsibility to try to end clearly illegal practices such as excluding members of one sex from vocational schools and courses in its own projects.

Finally, OE's most visible shortcoming in tackling the problem of sex-biased vocational education has been the absence of a commitment to allocate discretionary funds for projects designed to overcome sex bias in vocational and career education programs. The OE Task Force's recommendation to set aside a modest portion of funds for Parts C, D, and I of the Vocational Education Act was summarily rejected. This was despite assurances in November 1973, from then Assistant Secretary for Education Saunders to a Senate subcommittee, that a special authority for programs equalizing opportunities for women was unnecessary since "the stated objectives can be attained through determined efforts under existing authority."

In a recent letter to PEER reporting OE's progress along these lines, the only project Commissioner Bell was able to report was a FY 1974 \$183,000 project on sex-role stereotyping in guidance counseling. This project was funded not with VEA funds, but with salaries and expense funds left over at the end of the fiscal year. While I understand from other sources that OE has funded a few other projects on sex discrimination in vocational education, it is clear that the agency has not committed itself to using discretionary funds for a serious attack on the problem.

#### CONCLUSION

In conclusion, given the weaknesses we have described in Title IX enforcement and in the Office of Education's role in administering Vocational Education Act programs, and given the mandate of the Vocational Education Act of

1963 "to strengthen and improve the quality of vocational education" the Subcommittee may want to consider amendments designed to ensure that programs funded under the Vocational Education Act do strengthen the quality of vocational education for young men and women equally.

This could be accomplished by:

Adding a requirement under Part B that state and local education agency plans set forth plans for ensuring that their vocational programs provide equal opportunity based on sex and race.

Specifying that program data be collected and reported by race, national origin and sex in each course.

Mandating set-asides under Part B (5%) and Parts C, D, and I (10%) for programs specifically designed to overcome sex bias in education.

In addition, the Subcommittee might urge the Office of Education to take the necessary steps to make the receipts of all of its vocational education funds contingent on an applicant's willingness to work to eliminate sex bias, through such means as language in guidelines and program announcements.

The Subcommittee's hearings on sex discrimination in vocational education bring much needed public attention to the severe restrictions on young women throughout vocational education. Although some of the information we've shared with you today concerns administrative inaction not readily susceptible to the legislative process, such as Title IX enforcement efforts, airing these problems in this public forum can itself be helpful. We hope that the Subcommittee will continue to ask HEW for an accounting of its progress in seeking compliance with the law barring sex discrimination in vocational education.

I would like to conclude my testimony with a comment on two issues which often seem to cast a shadow on discussions of sex stereotyping in occupational training.

First, we are not suggesting that *all* women enter vocational training in areas heretofore reserved for men. Nor are we suggesting favored status for women. We simply ask that, in an increasingly difficult world, women be given equal access to vocational training of their choice. We are also asking that vocational training enable its female graduates to face the competition of the labor market on an even basis—not, as they do now, with one hand tied behind their back.

Second, I would like to address myself to the fear—often felt but seldom articulated—that properly trained women will take jobs away from men. Today, in these times of declining U.S. productivity, that fear may be stronger than ever. I would like to refer the Subcommittee to the testimony of Professor Paul A. Samuelson, one of the country's most respected economists, before the Joint Economic Committee, on the subject:

"One of the greatest frontiers to improve U.S. productivity, GNP, and what is more important our Net Economic Welfare, is the present unused potential of women in our economy. If because of the dead hand of custom and discrimination half of our population have a quarter of their productive potential unrealized, then a gain of between 10 and 15 percent of living standards is obtainable by ending these limitations and discriminations. This is probably a conservative minimum estimate. And note that this is a permanent increment to our standard of life and well-being, not just a temporary dividend.

"Will economic gains to women come at the expense of male workers? Will it structurally change the income differentials between occupations and skills? What are the repercussions on the family? On the birthrate, quantitatively and qualitatively? These are not easy questions to answer. But there are so many unfounded assertions that go the rounds on these vital topics implicitly and explicitly, that it is worth making an attempt to give approximate guesses on what research will some day give us as to the justified answers.

"First it must be said that by and large the increments that come to national income by the additional productivity of a new group are *not* at the expense of the previous group in society. This has been demonstrated again and again—by the history of U.S. immigration, by the long overdue upgrading of Black American's economic opportunities, by the increasing education of all classes of American society. Each group produces more, consumes more, saves more. The law of diminishing returns, as it would apply to a largely agricultural economy of the Malthus type, has effects of secondary and tertiary magnitudes in an advanced economy, like that of the United States or Western Europe."

Today, unemployment among women is 41% higher than among men. Remember, this reflects disaster not only to them but to the children they support. Contributing to this situation is the fact that up to now, many of these women

have been prevented from receiving the more highly skilled vocational training necessary in today's labor market. This discrimination is proving uneconomical not only for these women as individuals but for the entire country at a time when we can least afford waste of any sort. It must be ended, not later but now.

Ms. Knox. Good morning. I am delighted to be here this morning. I am Holly Knox, director of the PEER (Project on Equal Education Right), and here with me this morning is Celia Steele from PEER.

PEER is monitoring progress under the Federal laws barring sex discrimination in education, chiefly title IX of the Education Amendments of 1972. It is a project of the NOW legal defense and education fund.

Before coming to PEER, I served for several years as a legislative specialist in education with the Department of HEW, and in 1972 I chaired the Office of Education's task force on the Impact of Office of Education Programs on Women.

There has already been a great deal of testimony before this subcommittee on the seriousness of the problem of sex discrimination in vocational education, and I won't repeat that since time is short.

I simply would like to note that of all the myths today surrounding women in the work force perhaps the most important one is the idea that women work because they want to or to earn extra pin money.

Women are working today because they have to. Their families depend on their income for survival. There are many changes in the economy today which are increasing the importance of a woman's income to her family.

Based on current trends and future projections, it is clear that the young woman in high school today can expect to work most of her adult life outside of the home.

There is strong evidence that women's participation in the labor market will continue to grow.

In the short term, because of the inflation and the depressed economy, in the long term because of the declining birth rate, and, in addition, given the rising divorce rate, a young woman's chances of becoming a head of household and sole support of her family are greater than ever before.

The committee has heard extensive testimony about the seriousness of sex discrimination in vocational education. Ending sex discrimination in vocational education is no longer just a matter of gallantry.

As you know, sex discrimination in vocational education has been illegal since 1972 when title IX of the Education Amendments of 1972 were enacted.

However, on the basis of HEW's current enforcement record under title IX, we strongly urge the subcommittee not to look to that law as its only lever for ending sex bias in vocational education.

In the nearly 3 years since title IX was passed, HEW has fallen far short of its responsibility to enforce that law. The Department's activities have been inadequate in several respects: Its failure after almost 3 years to issue a final regulation; its failure to enforce the law's clearcut, unambiguous provisions energetically in the meantime; inadequate notice to school administrators, data collection, and staff training; and evidence that title IX is low priority among HEW's enforcement efforts.

A clear and comprehensive regulation spelling out the equal opportunity responsibilities of institutions receiving Federal money is cornerstone of an effective enforcement program.

In areas of education where the implications of the sex discrimination law raise controversy or complicated problems, and there are many, a regulation interpreting the broad antibias law is essential for guidance to school administrators who must comply and agency staff charged with enforcement responsibilities.

Yet, HEW took 2 full years to issue a proposed title IX regulation. Even in the best of circumstances, a final regulation cannot possibly take effect before summer, too late for an impact on plans for the next school year.

The delay, which the U.S. Civil Rights Commission recently stated has "effectively nullified the intent of Congress in enacting Title IX", has been disastrous.

In the meantime, despite a backlog of complaints, HEW is using its own failure to issue a regulation to justify inaction on complaints of all kinds.

A look at the complaint log at the Office for Civil Rights shows that, time and time again, regional enforcement staff explain their failure to resolve title IX complaints by lack of guidelines.

Some aspects of title IX, such as the athletics provisions, do involve controversial and complex enforcement question which may justify waiting for a final regulation.

On the other hand, HEW should be moving vigorously ahead to enforce the law in education areas such as vocational education, where there is no ambiguity about the meaning of the law.

Title IX clearly bars sex bias in all aspects of vocational education, from counseling to admissions, to treatment of students once they are in a training program, and the issuance of the regulation will not change our understanding of that fact.

One of the most dramatic examples of HEW's failure to enforce clear provisions of the law has been its failure to act against single-sex vocational education schools, which are explicitly forbidden by the statute.

In its own civil rights survey, HEW identified 25 single-sex schools. Under the law, these institutions have until 1979 to desegregate if they are carrying out a plan approved by the Commissioner of Education as of June 1973.

According to HEW's own guide for civil rights enforcement in vocational schools: "A single sex institution is in noncompliance right now if it is not eliminating admissions barriers, according to plan." They have to have a plan or they are out of compliance.

"And according to Title IX, the plan was to have been submitted", as I mentioned, "by June, 1973. So far no plans have been approved. Kentucky submitted some, but they are unacceptable. Massachusetts and New York have the best of intentions and the District of Columbia is actually working on one. But that is the extent of it." I am quoting again from HEW's own civil rights guide.

Particularly in the case of vocational education institutions, HEW has also failed to give institutions covered by title IX adequate notice of their rights and responsibilities under the law.

The Department still declines to ask institutions to submit an assurance that they will comply with title IX, again citing the absence of a regulation, an assurance which would at least let these institutions know that they are covered by the statute.

To this day, HEW has not directly notified most vocational institutions that they are subject to title IX. In May 1973, that is a year after the laws was enacted, the Department sent a memorandum on title IX to the States, urging them to pass it on to their vocational schools within the State. This was the memorandum that was intended to notify schools that they could submit a desegregation plan, but only if they submitted it by June 24, 1973.

This was 1 month after HEW mailed the notices, not directly to the vocational schools concerned for the most part, but to the States.

While OCR did send the memorandum directly to some 50 vocational schools they knew were single sex, there is no telling how many other single-sex schools were missed or how many vocational schools ever received the Department's memorandum at all.

In any case, it is likely that some schools eligible for transition plan received no decision time to submit a plan, did not receive notices in time.

HEW has also been slow to collect the basic data it needs to pinpoint major title IX compliance problems. Last year, the Department did survey the Nation's specialized vocational schools and determined that almost all responding schools have potential sex-discrimination problems.

However, it has yet to collect enrollment data by sex for vocational courses in comprehensive high schools, where most vocational students receive their occupational training.

We are also concerned about the adequacy of enforcement staff training under title IX. Last year, staff in three regional offices received 1 day of training to acquaint them with all aspects of sex and race equality compliance under title IX and title VI of the Civil Rights Act which bars race discrimination.

For a staff with no experience in handling sex-bias complaints, one training day is not likely to provide them with sufficient knowhow to carry out an effective enforcement program.

All in all, there are many indications that the elimination of sex bias in vocational education, or in education generally, is extremely low priority within the Office for Civil Rights.

In addition to poor performance involving the regulation, notice, data collection, and training, OCR's plans for future title IX enforcement raise questions about its commitment to carrying out the law.

According to one HEW official, as of February, 1975, only 39 vocational education compliance reviews were in progress, planned, or contemplated. There are over 1,500 specialized secondary vocational schools in the country. Clearly, these compliance plans do not begin to meet the needs of even a sizable fraction of the young women in vocational education.

Perhaps the most distressing sign of its sluggish title IX enforcement arrangements or efforts is the Office for Civil Rights failure to keep accurate and current reports on its own progress.

Because of inefficient reporting procedures, OCR's top staff does not, itself, have a good grasp of the agency's performance, no less can it provide a proper accounting to Congress and the public.

While the agency was forced by court order to begin keeping some status report on cases, complaint logs are forwarded to headquarters only quarterly. The agency has never produced periodic summary status reports on title IX cases, even for its own use.

Records dating back three years to title IX's enactment are so disorganized that it would take HEW staff days, if not weeks, to find out the status, or even the accurate number, of all title IX complaints filed since the law was passed 3 years ago.

Given HEW's 3-year history of poor performance under title IX, it is clear that we cannot rely solely on title IX enforcement to end damaging sex stereotyping in vocational education.

Instead, one must look at HEW's other powerful lever for securing equal vocational opportunities for women: Over—

Mrs. CHISHOLM. Excuse me one second, Ms. Knox. I am watching the clock. I know the bells are going to be sounding very soon for the entire committee.

I was wondering if you could summarize, so as to give the members, before they start leaving, an opportunity to ask questions. In addition may I note that we have to hear from HEW this morning. They are here. I am sorry to have to make these reminders.

Ms. KNOX. OK. The programs under the Vocational Education Act present a tremendous potential for solving the problem, but there is evidence that the Vocational Education Act is actually widely supporting programs which are restricting vocational education opportunities for women.

My testimony discusses some of the evidence which the Office of Education task force report, which I took part in, found 2 years ago. The General Accounting Office, of course, found some additional evidence of that.

Two major obstacles have so far stood in the way of assuring that federally funded vocational education programs do insure equal opportunities for women.

First of all, most of the money goes to the States, and the Office of Education at the Federal level has only a limited amount of influence on how these funds are spent.

Second, the Office of Education has failed to exercise the program authority it does have in several important ways. And I should say that looking at the agency's—what the agency has done on this over the last 2 years since that task force report was completed, I think that Dr. Pierce personally deserves some credit for moving some in this area at a time when many top OE officials have simply not been interested.

However, there are many important things that the Office of Education has failed to do. It has not tied the granting of funds to a recipient's willingness to overcome sex discrimination in education. That is crucial.

There are many ways in which they can do that. The Office of Education, too, should require an assurance of compliance with title IX. They have not done so.

They should, as Ms. Schiffer and Greenberger mentioned, put explicit guidance in guidelines and regulations. They have not done that.

And I should note that the general regulation which simply mentions title IX coverage is 83 pages long, and I think it is unlikely that grantees even realize that that provision is there, no less take it seriously as a contingency of funding.

Finally, the Office of Education has not taken action to see that its own discretionary funds are spent on projects for overcoming sex discrimination in education, and I wanted to mention an example of the Office of Education's failure to act in a career education booklet they have just put out called "Career Education: How To Do It: Creative Approaches by Local Practitioners", in which they have 239 suggestions on how to set up a career education program. Only one deals with sex stereotyping.

And the booklet doesn't even contain a boilerplate notice that recipients must comply with title IX.

In addition, as other people have mentioned, there is a data collection problem. Finally, the Office of Education has not allocated funds to the problem, although it has argued a number of times to avoid legislation, for instance, to avoid enactment of the Women's Educational Equity Act, that they needed to additional authority to spend their own funds on these projects.

In a recent letter to us, Commissioner Bell was only able to cite one sex discrimination project. That was a \$183,000 project on sexism in vocational counseling, in which was not even funded out of the Vocational Education act, and I understand that there have been a few other programs funded, but they are very few and far between.

In conclusion, we have several recommendations the committee might want to consider, including a requirement under part B that State and local agencies set forth plans for ensuring that vocational education programs provide equal opportunity based on sex and race; specifying program data by sex, race, and national origin; mandating set-asides under part B, C, D, and I for projects specifically designed to overcome sex bias in education.

In addition, the subcommittee might urge OE to take the necessary steps to amend its guidelines.

Thank you very much.

Mrs. CHISHOLM. Thank you very much. I would just like to make a brief announcement. In view of the fact that members of the committee have several questions to ask HEW, it has been suggested that we ask them to return next Monday morning because we are running against time.

So next Monday morning at the same time we will ask HEW to come before us. We are very sorry that this has happened, but, in light of time considerations we think this is the most equitable resolution.

Hopefully, we will be able to complete some very important testimony this morning.

Ms. Steele?

Ms. STEELE. Ms. Knox condensed her testimony, and that is it.

Mrs. CHISHOLM. Thank you very much. Ms. Knox, I have a couple of questions. First of all, the proposed title IX regulations don't cover sex stereotyping in curriculum material. The reason given by

HEW is that this would constitute a violation of the first amendment. Could you comment on this omission in the regulation and perhaps HEW's justification of this mission?

Mac KNOX. Yes. I think the omission is a shame. Sex bias in materials is one of the most serious kinds of bias in education, probably among the most damaging. HEW has never backed up its argument on the first amendment by a legal brief.

I think it should be noted we have looked very carefully at the legal issues since the NOW legal defense fund certainly does not want to win rights for women at the expense of us all. We concluded that in the area of public elementary and secondary education, that there is no first amendment bar to some kind of coverage of textbooks which are already centrally selected by public school officials, and in higher education I think there is a somewhat different question.

We submitted a legal memorandum to HEW to that effect, and that, unfortunately, have ignored it and have decided to go on without any coverage at all.

Mrs. CHISHOLM. I notice in your testimony that you believe that it is feared among many that training more women for jobs will then be taking jobs away from the men. Could you comment on this fear that seems to be so pervasive.

Ms. STREELE. I think I will answer that question, and thank you for asking it. I think a lot of people think that, and very few people have the courage to say that out loud. I would like to quote Professor Paul Samuelson on that subject. When he was testifying in July of 1973 before the Joint Economic Committee, he said that, if we utilized the presently unused potential of women, 50 percent of our population, it would mean a 10 to 15 percent addition to our gross national product, to our net economic welfare. He said that was a conservative estimate.

He also went on to point out that any increments to the national economy in the past by any group joining the work force have not been to the detriment of other groups, and this has been shown when American immigration--the improved economic opportunities. The fact is that each new group produces more, consumes more, and saves more, so I think this is an unfounded fear.

Mrs. CHISHOLM. Representative Mink?

Mrs. MINK. Thank you. Madam Chairperson I am really delighted to welcome the panel. I think all of you have made an enormous contribution to a better understanding of the scope and importance of the subject matter that we are discussing and specifically of the lack of initiative and drive on the part of the Federal Government in pursuing this matter through the failure to even come through at this stage. 3 years after the enactment of title IX, with regulations which can be promulgated, so I want to commend all of your statements.

I do have a few specific questions. In the interest of time, I will try to get through them as quickly as possible. With respect to the grievance procedure, may I have your comments, from any or some of you on the panel, as to how you see the title IX regulations, your recommendations with regard to the grievance procedure, and how that may or may not exacerbate our problems?

Ms. SCHIFFER. The title IX regulations also have been sent to the White House and they have now been made quite public, though not through the graces of HEW. They provide that there will be

complete HEW deference in the first instance to grievance procedures which are established by the school.

We think that that is an absolutely outrageous procedure, asking the same person who is being complained against, who has presumably committed the problems or has created the problems which are being complained about, to be the judge of his or her own behavior.

We have no objection to grievance procedures and functioning grievance procedures. What we have objection to is deference to those by DHEW in a way that would simply serve to delay the bringing about of effective change and effective remedying of the complaints, and we would suggest that the regulations omit any mention of grievance procedures, that, if local school districts, for instance, want to develop grievance procedures and develop effective ones, people in fact will use them, but once a complaint has been filed with HEW, then it must be under strict goals and timetables, under strict timetables to handle those complaints and bring about an effective remedy.

Our final quick note is that the grievance procedure deference established does not even build in timetables, so that presumably somebody could be bogged down for many years in their own school district before a Federal agency would even take a look at the matter.

Ms. GREENBERGER. I would just like to add something very quickly on that point. You have to keep in mind two distinctions. There are the grievance procedures in the private university or school systems that are being complained against, and then there are either grievance procedures to be developed in the agency itself, the governmental agency itself.

I think we also have serious problems about the legality of granting authority to a private institution to make a decision about whether or not there is discrimination, whether or not the Federal Government should be spending its money, and whether that is improper delegation of Federal authority.

Second, there should be attention focused on what complaint procedures, what grievance procedures, are set up within HEW itself and whether there are strict timetables for action there, whether there ought to be procedures developed to make sure that the complainant has a fair opportunity to present his or her case and to answer whatever information the university presents, so there are really two aspects to the grievance procedure that raise problems.

Mrs. MINK. Thank you. My next question has to do with the Casey amendment which was added to the appropriations bill last week. I am sure you are aware of this amendment. I am not altogether sure that the members of the House in voting on it were all too sure about the implications of that amendment.

I would like to ask a member or members of the panel to give us an explanation of what this does to title IX.

Ms. KNOX. The Casey amendment basically makes two changes in title IX. It forbids HEW from enforcing title IX in a way so as to require the integration of physical education classes and the integration of nonsocial—that is, professional honorary fraternities and sororities.

Now, it is not quite clear exactly what all that language means, but it seems that those would be the two major changes from existing law.

I think my organization has a very serious problem with that. There has been a great deal of discrimination in physical education classes. Girls are receiving one kind of training, dance and acrobatics and exercises, whereas boys are receiving very different kinds of physical training designed to increase their ability to compete, to build physical strength and so on.

The integration of physical education classes will be an important way of encouraging identical physical education training for both males and females who have the same interests in learning to play active sports, in building their own physical abilities and so on.

In addition, honorary fraternities and sororities are often closely connected with the occupational opportunities. Those are part of the oldboy network, if you will, or the oldgirl network, and the segregation of those honorary societies often cuts one person of the opposite sex off from the opportunity to make these important occupational contacts.

Mrs. MINK. My last question has to do with the gathering of data, which I recognize as a very, very important element of enforcement.

The statement that we were to have heard this morning presented by Dr. Pierce indicated that they decided not to continue collecting data because OMB said it would duplicate efforts underway by the National Center of Education Statistics, but now they feel that maybe they erred and are going to go back to data collecting.

Could you clarify exactly what kind of data they should be collecting and should have in order to have effective enforcement, so that they can know in no uncertain terms what it is we are after?

Ms. SCHIFFER. Yes; we think that data needs to be collected by occupational course; that is, training in beauty, home economics, or auto mechanics; and as to each of those occupational courses, by race and by sex and by national origin; and all of these data must be collected on a school-by-school basis.

It is only by collecting the data in that very detailed way that one can go to the statistics and know that such-and-such a vocational school is not admitting women or has a very low number of women in its automotive course or has a very small percentage of men in its home economics or home training kinds of courses, and that triggers a need to investigate further and see exactly what the problem is with that school.

If the data are collected by anything but a school-by-school basis, you can't tell if discrimination is going on. If you do not have the data collected by occupational course, you can't tell where in the school the discrimination is.

We are particularly concerned with sex discrimination aspects of it, but it has been repeatedly brought to our attention that black women are having particular problems and that the national origin problem also is present in an additional stereotyping manner.

It is only by this full method of data collection that there can be any beginning of awareness of where the problems are, so that remedies can be found.

Mrs. MINK. Thank you very much.

Mrs. CHISHOLM. Representative Quie.

Mr. QUIE. Thank you. Let me ask the question that I asked Dr. Kaufman. Should we remove the category of home economics from vocational education and put it in with total vocational education,

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Mrs. MINK. Thank you very much.

Mrs. CHISHOLM. Representative Quie.

Mr. QUIE. Thank you. Let me ask the question that I asked Dr. Kaufman. Should we remove the category of home economics from vocational education and put it in with total vocational education,

because we moved the other categories, agriculture, trades, and industry, and so forth out?

Ms. GREENBERGER. Ms. Schiffer and I are not experts in the area of vocational education. I don't think either one of us would like to claim what types of programs ought to be offered.

However, it does seem to make a certain amount of sense that an extended concept of what home economics could be would be useful to most—both men and women, or boys and girls. It would be an attractive proposition, but that is certainly something for experts in the area of vocational education to decide. We are more concerned with proper methods of implementation.

Mr. QUINN. Maybe I ought to add here that home economics leading to employment is included in the rest of vocational education. It is just not the one relating to employment.

Ms. SCHIFFER. I would also note that I have looked at the statute, and it provides specifically that home economics includes plans which help people to accommodate working with being at home. I mean there is very specific language to that effect, and I think that is a very important focus which the home economics programs should have.

We are all familiar with the problems of the working mother, for example, or the working woman, or, for that matter, the working father, who has to make an accommodation between the demands of home and the demands of the workplace, and that dimension of the home economics problem which has been recognized by the statute really be given further focus in a way which would make it a very helpful backdrop for the more straight vocational training programs that are available through the rest of vocational education act.

Mr. QUINN. If we were going to have a category for nonemployment type of activity, it would be a misnomer because I think my wife works as hard as I do, so I shouldn't say nonemployment. I also recognize that there is a growing number of househusbands compared with housewives. I think there is a growing number because I know many now that I didn't know before. [Laughter.]

You are all experienced on this, but there is so much more than one learns about the home in one's activity when one is not being remunerated for the work one is doing. It seems to me that you could expand the training beyond home economics, the whole area of volunteerism being one example.

Ms. SCHIFFER. We completely agree with that, that a restructuring of the substance somewhat along the lines suggested by Representative Lehman would certainly be fully appropriate.

Mr. QUINN. I notice in the testimony none of you talked about goals or quotas. Should we shy away from goals or quotas?

Ms. GREENBERGER. I think there is a problem in using the terms, "goals" and "quotas" per se. They are so emotion-charged at the moment that to bring up a discussion of goals and quotas, I think, conjures up in people's minds the idea of automatically excluding very well-qualified men or white men in particular and bringing in unqualified women and blacks.

In fact, I think, whether we talk about goals and quotas and restrictive percentages, what is important to talk about is affirmative

action and how to bring into focus excluded groups who have been ignored in all areas of our society and how best to bring them into all areas of the society, so they can participate in a full manner.

Mr. QUINN. It is more difficult, of course, to work through affirmative action without goals and quotas, at least in comprehension. I imagine that is where we are now. Would you encourage requiring affirmative action in the legislation beyond the research and innovative titles C, D, and I, but in part B as well, which is the basic grant program?

Ms. GREENBERGER. I think that is a crucial point. It has to be there. Without affirmative action, I think a mere policy statement that there should not be sex discrimination will lead to the same sorts of problems that we all recognize today, and the importance is to focus on the guidance that will be helpful to people who have to implement vocational education programs in their areas.

As to the sort of affirmative action steps, they can take in order to open up a program, in order to make all types of occupational training facilities available both to men and to women and to boys and girls, and, in that sense, affirmative action—I think that is very crucial to have in the legislation.

Ms. SCHIFFER. We would simply note that possibly one of the most successful enforcement efforts to date has been that under title VII, not simply through the Equal Employment Opportunity Commission, but generally because of broad participation by private organizations and private people as well, and the effectiveness of title VII has really been premised around the notion of affirmative action which has gone a long way to start taking proper steps toward alleviating discrimination in employment throughout the country.

Mr. QUINN. Ms. Knox, could I ask you about one of the things you say in your statement? In the conclusion is that we collect and report program data by race, national origin, and sex.

We had a Buckley amendment. The difference in sex is the easiest to determine of the three from observation. Race, I guess, would be next easiest. The national origin is perhaps the most difficult.

Would you care to address yourself to the problems that you find in any of the three areas? You know, we started prohibiting discrimination on the basis of race first, then women and national origin, but we kind of dropped that aside evidently.

At the moment, I would say that discrimination on the basis of sex probably ranks as high as any of the problems that face us, but, as you relate among the three, could you give us your observation of the difficulty we have in acquiring that information?

Ms. KNOX. I am not familiar with the problems that the Buckley amendment raises, but certainly the Civil Rights Office has been collecting data like this for the purpose of enforcement, so it is being done.

I really am not familiar with the problems that may arise in collecting data on national origin. I am not an expert on that.

Certainly, there have been some ambiguities in collecting data on race. You have four different grandparents of four different races. What do you put down for race? There is always that kind of problem.

I don't think we need to be accurate down to the last head. What we need is a general picture of how vocational education is serving

kids of different sexes, races, and national origin, and even some data which admittedly have some inaccuracies goes a long way toward giving us that information.

Mr. QUIE. Lastly, is there more of a problem with guidance and counseling than there is in making programs available, or is the greatest problem in making programs available or not encouraging individuals to take part in one program versus another?

Ms. KNOX. I am not sure of exactly the extent to which formal exclusion is a problem, but there are not statistics on that nationally. I think those two problems are intertwined. Guidance and counseling is a very serious problem. It has developed that way in part because there has been a policy of exclusion of kids of one status or one race from certain kinds of vocational training.

Certainly, guidance counseling is part of the process of access. If your guidance counselor tells you that girls just don't do well in auto mechanics and "Why don't you take secretarial work, dear?" that is a problem with access which the school is responsible for, and I think you have to look at that as a part of the whole process.

It is certainly a very difficult problem. It is hard to get at because much counseling goes on behind closed doors between a counselor and a student. It reflects the counselor's own prejudices, and many of the testing materials which are used to give students guidance as to what kind of vocational fields they should go into are extremely sex biased.

Mr. QUIE. Have you studied some particular areas where exceptionally good counseling or guidance goes on, where job opportunities or training opportunities are made available, and then the change that this does create within the institution in the area of economic opportunities opening up for, for instance, the female, and the jobs have been—

Ms. KNOX. I wish I could cite a case where a school has gone through that process, but I cannot. I do not know of any. It doesn't mean that there aren't any, but I have a feeling that most schools are a lot further behind than that. It simply has not gotten to that stage.

Mr. QUIE. I recognize that most schools are rather behind, but I thought—

Ms. KNOX. I wish I knew of one too.

Mr. QUIE. I know of a couple in my own district where I think they have made some pretty substantial progress. Anyway, they advertise it a good deal.

Mrs. CHISHOLM. Representative Miller?

Mr. MILLER. Just a couple of questions. Ms. Schiffer, is it correct to characterize your testimony that you think there is a flaw at both levels, both at the regulation level and the statute level?

Ms. SCHIFFER. That is right.

Mr. MILLER. An ambiguity that you are talking about in the statute level?

Ms. SCHIFFER. Less an ambiguity than a clear direction having been given to the agency which is involved and to the local implementing people to take appropriate steps.

Mr. MILLER. And, yet, you cite—I don't know actually where, but in your testimony you cite that HEW is by executive order, by statute, by a couple of other provisions—has been told directly that this type of discrimination is not to exist.

Ms. SCHIFFER. That is correct, and they have been told that under other statutes—they have not been told it specifically under vocational education act. I think that it is true—I can understand how this committee can feel somewhat futile about telling DHEW yet once again it has an obligation, and I think the thrust of our testimony was that this time perhaps it should be spelled out in very great detail in the statute.

Mr. MILLER. That is the point I want to get to.

Ms. SCHIFFER. So that they cannot this time say: "Well, we are making some vague efforts." In other words, if the statute says: "Collect statistics. Take reports. Write regulations. Have these enforcement procedures. And, by the way, the committee will have oversight hearings," this time perhaps it will be more clear to them what the blueprint is for action.

Mr. MILLER. See, that is my concern. In my rather short tenure in the House, in almost all of my subcommittees, great hell is raised with various departments and agencies based upon regulations, but, when you go back to the language which the legislature gave them to work with, we really told them to take care of the problem as they see fit.

I am concerned that, if we are going to rewrite this act or amend this act—about what degree of specificity we ought to put into the statutes.

I come out of a background in the State legislature where there was no need for regulations. Of course, we have the largest set of codes in the United States. I am not sure that is better, but I am concerned that we as legislators use the agencies as whipping boys and, yet, we don't address ourselves to the problems. We hold hearings where we call them up and say: "You haven't done this. You haven't done that." Yet, we have been more than lenient with them in terms of telling them to do that.

Ms. SCHIFFER. I think that whatever the merits or demerits of very detailed laws may be in an area such as this where we now know—I mean, we have had experience with the way in which HEW will implement general requirements. We will say, learning from that experience, that there is a need in this instance for much more detailed legislative guidance and that—pursuant to that, then regulations can be written and actions can be taken, but we do strongly suggest in this case that the statute itself be modified to be very detailed about what actions must be taken by the agency because of the experience in this area.

Mr. MILLER. Would you also apply that in terms of directing them as to what this Congress expects or HEW expects out of State plans? Apparently, according to the testimony earlier today, there is some inadequacy to understand what the Congress wants also.

Ms. SCHIFFER. I know. I think that would be helpful. Congress, of course, always runs into the problem that by putting something into the legislation, it becomes inflexible, and, if in the future some changes are needed, then that requires amendment to the legislation rather than to the regulations, but I think that some specificity about what should be in State plans is required.

I think also when Dr. Kaufman testified about the problems of State plans, one of the things which occurred to me was that perhaps

there isn't sufficient guidance to State agencies about how to make the State plans apart from regulatory guides.

In other words, perhaps there should be provision for consultants from HEW who could kind of go over the plans and say: "This is really what you should be putting into the plan. This is what you should look at with more technical assistance," and simply regulatory assistance in that regard.

Mr. MILLER. Thank you. I would like to thank the panel because I think that the prepared testimony that you have submitted to us really lays some of the groundwork that will enable us to draw this whole area into focus with the agency as to exactly what their role is.

Ms. GREENBERGER. I would like to add just one brief note to what Ms. Schiffer said in terms of drawing a balance between detailed statute and what should be left to the agency in its regulation.

As attorneys, we are concerned with inadequate enforcement of governmental agencies. We are often faced with the problem of what is legislative intent and what is the use of discretion on the part of the agency.

Because of the great importance that we see in court action and that option open to individuals to remedy rights which they feel they have in their legislature. I think it might be useful to keep in mind in drafting the legislation—try to keep and give to the courts and to the public guidance as to what really is required on the part of the agency, so that the court later in interpreting what the vocational act requires will know that, if the HEW, for instance, does not review, say, State plans, does not after years of the legislation being on the books, it does not take other sorts of action, that it is not acting according to the dictates of the statute and is not acting according to congressional will, and that is the way the framework might be a useful one.

Mrs. CHISHOLM. Representative Buchanan?

Mr. BUCHANAN. Thank you, Madam Chairperson. Ladies, first of all, I would like to make it clear where I am coming from. I appreciate very much the remarks of the panel, and I think it has been most useful to me personally, as I am sure it has been to the committee.

I am on your side. I think that we have a big problem here that is not being taken sufficiently seriously by the Congress or anyone else, and with the two-working-parent family becoming the norm, with the number of women who are heads of households, and with what the statistics say both as to employment records and as to vocational education per se, as to what is happening and what is not happening, I think this is one of the most serious problems that faces the country, so please understand I am not coming from a point of view of wanting to help anyone who is being recalcitrant on this subject, but it would appear to me that the GAO criticism of HEW has some substance, in the first place, in terms of supervision. I know I worked pretty hard on our problems in the Deep South concerning busing. It only became a false issue when it moved North. It is a very real issue in the South. [Laughter.]

Mr. BUCHANAN. Now, you know, the real changes were brought about by the Justice Department and the Federal courts. I think that is where we start getting some solutions, when the courts begin mov-

ing in and saying: "You must do this and you must do that." The Civil Rights Division, Justice Department, carried that ball with help from various organizations, like NAACP, and we began to get our business straight at that point with that kind of procedure, but with HEW just cutting the money off every time you turn around, I do not think that contributes significantly toward a solution of that problem, and it did contribute significantly to the problems of educators who I have found in my personal experience were not the heart of the problem.

Ms. SCHIFFER. I would simply note that a lot of the very strong and effective action which was finally taken by Federal courts was done under the aegis of statutes which provided us the ultimate weapon to cut off the Federal funds, and a lot of those court cases were brought on the grounds that there needed to be plans so that funds wouldn't be cut off.

I think as an ultimate sanction though in the civil rights area very much the conditioning of Federal funding on the grounds that there could be no race discrimination—it was very much the structure of those schemes, and, similarly here, we are not urging that funds be cut off. I don't mean that anyone desires that.

In terms of constitutional requirements, however, of not spending Federal money when, you know, it is supporting discrimination, and in terms of giving some important leverage to implementation in nondiscrimination plans, that provision must be in the statutes, and we would also note that in fact in our experience with other statutes, funds are so rarely cut off that, as a lever, that has become somewhat ineffectual, and we would note that HEW might be slightly less reluctant than in some exemplary cases to cutoff funds because I think that if it did cut off funds once or twice, schools would be much more willing to meet the nondiscrimination requirements.

Mr. MILLER. Would the gentleman yield?

Mr. BUCHANAN. Yes:

Mr. MILLER. Perhaps Mr. Buchanan's suggestion is that we cut off funds to HEW so the educators aren't at fault.

Mr. BUCHANAN. I think I agree with the gentleman. We need to get more specific instructions to HEW about what it is that we are requiring of them. The Department of Health, Education, and Welfare 6 years ago cutoff all funds to Alabama Educational Television Commission because of a challenge to its license based on discrimination.

During that 6-year period, there has been a change in administration. All the problems have been corrected. All parties to the suit agree to that, but during this time of challenge and throughout that time there were no education television funds from HEW nor are there to this day, even though all parties to the suit agree that the problem we are talking about now is something that was over 5 years ago.

We were one of the pioneer outfits in the country and we led in network television. It is very important to the life of our State. The State is carrying the ball. We are doing without the Federal funds, but it is important to all of our people, and I was one of the ones who very much wanted to see the problem resolved, but I really have funny feelings, given our experience. Maybe there will be more even-handed justice in these areas. I hope so.

Ms. SCHIFFER. Two points. One is that, of course, the other side of cutting off funds is that, once there comes to be compliance, there should certainly be immediate restoration. I don't think that any of us think that there should be really punitive measures, continuing punitive measures.

Second, in addition to fund cutoffs, I think Ms. Greenberger in her testimony specified a number of other broad—specified a number of other more specific and narrow sanctions that could be used.

We think it is particularly important, though, that a framework of sanctions be provided in the statute.

Mr. BUCHANAN. Thank you. Frankly, I think you made a very good case for that. I just wanted to raise the question because in our own, perhaps narrow and limited, experience we have a hard time with the Department of Health, Education, and Welfare, on the one hand, in that they are cutting off our money every time we turn around. On the other, it would appear to me that their overall supervision in terms of telling people, particularly in this area of sex discrimination, what actually we are supposed to be doing, and the help they have given to educators, most of whom aren't the heart of the problem, in my judgment, as to what it is that you do to try to change the situation, is being done rather—adequately.

Ms. KNOX. I would just like to add that there is not a single school district or college today that has had that experience on a case of sex discrimination. There have been no funds cutoff despite the fact there has been title IX for 3 years and the Executive order covering that for many more years.

Mr. BUCHANAN. Thank you.

Mrs. CHISHOLM. Thank you very much. I would just like to say to the panel that we really appreciate your appearance here before the committee because, as we attempt to write or modify this legislation, we want to make it meaningful and relevant to the problems and concerns of our times. With respect to the entire question of affirmative action, I think it has to be noted that because our society goes through cyclical changes in which we have prosperity, recession, and depression, ultimately it will mean, unless we write something into the legislation to get all the different persons that are concerned with affirmative action to recognize it—it will always be the minorities and the women that will be fired every time we have change in this country.

I think that one of the next big battles that all of us are going to have to work through is that entire question of affirmative action in which in many instances we may have the white males actually rising up against everybody.

Again, I want to thank you for your appearance.

We will stand adjourned.

[Whereupon, at 12:25 p.m., the hearing was adjourned.]

[Information submitted for inclusion in the record follows:]

PREPARED STATEMENT OF ROXANNE BARTON CONLIN, CHAIRPERSON, IOWA WOMEN'S POLITICAL CAUCUS

Thank you for the opportunity to express our views on a subject that critically affects the lives of girls and women.

Vocational education is a large and somewhat amorphous topic. Vocations and careers are interchangeable words, but recently vocational education has focused

on those careers requiring a two-year college degree, those careers requiring practical skills and abilities.

The work role choices of males and females are clearly differentiated. Those of males often require lengthy apprenticeships, manual skills, physical strength or agility, and the recompense is much higher than for those of females, which are often service oriented, sedentary and tedious. What factors influence the choice divergence between males and females? Are they free choices dictated by individual preference, or are they conditioned choices, dictated by myriad influences and legitimized by the educational process? We conclude they are the latter.

A cursory review of the life experiences of children points up the salient differences. Socialization begins with pink and blue. Studies indicate girl babies are cuddled more than are boys. Toys for girls are geared toward homemaker-mother roles, dolls, dishes, sweepers, and other household equipment. Boys play with trucks, blocks, trains, and farm and construction equipment. The media and pre-school books show adults in sex-typed occupations and performing sex-typed jobs. Kindergarten children arrive on their first day of school with well defined ideas concerning their appropriate sphere of activity. Girls head for the "kitchen corner" and boys move towards the active toys. When books become a part of the learning experience, they reinforce the traditional stereotypes. In a study of 134 reading books, nearly all of which are used in Iowa schools, heroic girls appeared 36 times, heroic boys, 134 times; clever girls, 33 times, clever boys, 131, dependent and passive girls, 119 times, and dependent boys, 19 times.

The adults we expect young people to emulate are equally stereotyped and particularly in terms of their occupations. In the readers studied above, the technicians, factory workers, and sales personnel that were presented were 100% men. In one of the readers, women were presented in only three roles, which were, mother, fat lady in the circus, and witch. While men were job holders and fathers, women were either job holders or mothers, not both. Adult men appeared three times as often as adult women.

These models are not confined to readers but are used in every type of textbook from arithmetic to science to social studies.

By the time they reach secondary school, children's aspirations are governed in large measure by their sex. At the junior high school level, in spite of the clear mandate of Title IX, most schools continue to segregate courses by sex, particularly home economics and industrial arts. In the last four months, I have been made aware of these blatant examples. In eastern Iowa, a junior high school principal wrote the YWCA protesting the presence of a woman who told "his girls" that it was lawful for them to take industrial arts. He threatened to take legal action against her, but was informed that any legal action that would be, would be against him. In southern Iowa, a principal expressed concern about "making the girls act like boys" by opening up classes. A West Des Moines principal stated that there was not room for girls in shop classes, and that if they wanted to learn that subject they would have to wait to take it in adult education (available only to persons over 18). More cleverly, four Iowa schools offer girls' physical education, a required course, at the same time they offer shop. Other schools rely primarily on peer group pressure and faculty discouragement to keep such classes segregated.

Teacher insensitivity also encourages young women to think about only traditional vocations. In an Iowa high school recently, a sophomore history teacher told his class that the economic crisis would be solved if women would stop working and go back home where they belonged. A school superintendent in St. Paul circulated a memorandum to faculty insisting that they teach traditional homemaker roles to female students. The examples are legion and their effect is chilling of the young women who might otherwise seek jobs in fields dominated by men.

The widely used Strong Vocational Interest test has two versions, one for males and one for females. The activity preferences a woman is asked to rate are oriented around such pursuits as furnishing and caring for a home and choosing between a preference for fashion magazines or household magazines. The men's form asks students to rate such things as developing the theory of operation of a new machine or supervising the manufacture of a machine. Where as males are asked to choose between travel to outer space and exploring the ocean floor, women are asked to choose between marrying a rancher or marrying a corporation president.

On the basis of such biased tests, school counselors advise young women on their job choices. It is not surprising then to find that 73% of the young women enrolled in vocational education were learning either homemaking or secretarial skills.

Vocational schools mirror society, especially in terms of employment. The salaries of women who teach secretarial, nursing, and home economics skills average \$1,475 per year less than males who teach the same number of students for the same number of hours, but whose skills are in "male" fields, such as mechanics and industrial arts. (See Exhibit A, attached). The salary differential results from importing discriminatory wage scales from business and industry into the educational system. Employees are compensated on the basis of earnings they would have if they were employed in their area of expertise. Needless to say, those areas assigned by tradition to women invariably pay less than those assigned to men.

In order to deal effectively with sexism in vocational education, we must deal with it effectively in kindergarten and throughout the educational process. Because these hearings are directed specifically at vocational education, we do have some short-range suggestions:

1. Appropriations earmarked for development, publication, and distribution of materials encouraging young women to think positively about non-traditional jobs in order to counteract the years of conditioning young women have been subjected to.
2. Funds made available for materials and conferences designed to help vocational-level guidance counselors to counsel young women fairly and fully about the wide range of jobs available to them and to help them find ways to support and actively encourage qualified young women to pursue those careers traditionally designated for men.
3. Salary schedules such as those used in Iowa area schools should be specifically prohibited so that women are paid on the basis of merit and not on the basis of skewed and biased wage scales used in industry and business.
4. Amending Title IX so that parents and students are clearly entitled to a private right of action against schools which deprive women of equal educational opportunity.

These proposals are modest, but they would begin the process of bringing women into full participation in the economic life of this nation.

#### IHEA SURVEY—SEX DISCRIMINATION IN AREA SCHOOLS—PRELIMINARY FINDINGS— IOWA HIGHER EDUCATION ASSOCIATION

Attached you will find a number of tables concerning sex discrimination in salary at Iowa's Area Schools. Figures on minority hiring patterns, as well as figures relating to the employment of women, are included. The study concerns professional staff only.

This preliminary study indicates:

- That 90% of area school administrators are men.
- That 74% of student services personnel are men.
- That 79% of department heads are men.
- That 68% of instructors are men.

The findings indicate that:

- Only 1% of total professional staff at area schools is minority (black, oriental, spanish surname).

Six of fifteen area schools report no minority employees.

The findings also indicate:

- A mean salary of \$12,365 for 931 full-time instructional male employees.
- A mean salary of \$10,890 for 358 full-time instructional female employees.

In summary form, this means:

- That women, on the average, earn \$1,475 less than men.
- That \$528,050 would be required to end salary discrimination at the area schools.

The figures also indicate:

- That more women are employed part-time than men.
- That part-time women are paid 29% more than part-time men.
- This suggests that more men, who are qualified for full-time employment, obtain full-time employment more readily than women who are similarly qualified.

This study and its conclusions are not intended to subscribe blame to Iowa's area schools, their boards of directors or their administrators. In a very real sense, the patterns of sex discrimination in Iowa's area schools are indicative of society at large. However, the problem is real and can be corrected with a moderate supplementary appropriation by the legislature. By contrast, if such an effort to demonstrate state commitment to ending salary discrimination is not made, women employees of area schools may opt to take a legal route. Under federal law, women could obtain up to three years back wages as a remedy for existing salary inequities. This could place the area schools in financial difficulty and cost the state three times more than \$528,050 required to solve the problem at the present time.

# SEX DISCRIMINATION AND SEX STEREOTYPING IN VOCATIONAL EDUCATION

MONDAY, APRIL 28, 1975

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ELEMENTARY, SECONDARY,  
AND VOCATIONAL EDUCATION  
OF THE COMMITTEE ON EDUCATION AND LABOR,  
*Washington, D.C.*

The subcommittee met at 9:30 a.m., pursuant to recess, in room 2175, Rayburn House Office Building, Hon. Patsy Mink presiding.

Members present: Representatives Mink, Blouin, Simon, Hall, Quie, Buchanan, Jeffords, and Pressler.

Staff members present: Jack Jennings, counsel for the majority; Charles Radcliffe, counsel for the minority; and Yvonne Franklin, minority legislative associate.

Mrs. MINK. The Subcommittee on Elementary, Secondary and Vocational Education will come to order.

We are pleased to have Peter Holmes, Director of the Office of Civil Rights, as our first witness this morning.

We apologize that we were not able to receive your testimony at the hearing scheduled last week and appreciate your cooperation and indulgence of our difficulties.

It is my privilege to open the hearings this morning on this very important subject of sex discrimination and sex stereotyping in vocational education and the chairperson, Mrs. Chisholm, requested I open the hearing since she was not able to be here at this precise hour, but she hopes to be able to be here this morning if her plane can arrive in time.

Mr. Holmes, if you will proceed please.

**STATEMENT OF PETER E. HOLMES, DIRECTOR, OFFICE FOR CIVIL RIGHTS, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, ACCOMPANIED BY SUSAN E. HAUSE, SPECIAL ASSISTANT TO THE DEPUTY ASSISTANT SECRETARY FOR LEGISLATION (EDUCATION)**

Mr. HOLMES. Thank you.

The Office for Civil Rights welcomes the opportunity to present testimony today on the subject of sex discrimination in vocational education.

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As you know, our authority to undertake compliance activity in this area arises from title IX of the Education Amendments of 1972, which prohibits, with certain exceptions, discrimination on the basis of sex in federally assisted education programs.

Our experience thus far in enforcing title IX has been limited in scope, and the object has been principally to develop the skills and tools necessary to field an effective compliance program once the final regulation has been approved by the President and published. This has been the approach with respect to all levels or institutions of education, including vocational education.

Specifically in the vocational area, in early 1973 I directed our Division of Elementary and Secondary Education in the Office of Civil Rights to develop a civil rights enforcement program to deal with institutions whose purpose is to train men and women to enter the labor market.

It is true that since the enactment of title VI of the Civil Rights Act of 1964, the Office has been primarily involved in investigating racial discrimination in elementary and secondary education. And within this ambit, the preponderance of effort was, at least until 1971, directed to the elimination of the racially separate dual school systems.

However, more recently OCR has begun to focus on aspects of the educational process—aspects that are frequently distinct from the traditional question of school segregation. These issues—such as discipline, counseling, ability grouping, assignment to course offerings—bear on the treatment of students and the delivery of equal educational services. And many of them are relevant not just to minorities under the provisions of title VI. They are equally relevant to assuring that female students are accorded an equal opportunity to advance within the educational system and to pursue the career of their choice.

As a starting point, OCR decided to concentrate its attention on about 1,500 area vocational education schools. The reason for the selection was that most of these particular institutions do not fall within the administrative responsibility of school districts, and as a result our Office had no prior knowledge of their compliance status.

We also felt that a review of area vocational schools would yield a broad understanding of the kinds of discrimination likely to prevail in vocational education across the board secondary or postsecondary. After all, these schools contain the range of vocational programs offered throughout the nation and they serve all walks of life—the unskilled, the skilled, the employed, the unemployed, all ethnic and racial groups, both men and women, teenagers and senior citizens.

Accordingly, in the spring of 1973, a special team examined the administration of 11 area vocational schools in five States: Pennsyl-

vania, Georgia, North Carolina, Arkansas, and California. During the course of the reviews, the team identified certain overt compliance problems such as:

Manuals or program descriptions which recommend or limit courses to boys or girls.

Orientation programs that separate boys and girls, exposing each only to descriptions of careers that are traditionally pursued by the one sex; for example, lectures on engineering given solely to boys, lectures on nursing delivered only to the girls.

In instances where such discriminatory practices were found to exist, corrective action was taken. The reviews also revealed other influences which are brought to bear on students as they begin to decide on an occupation and a career.

For instance, the team found that admission of students in secondary level area vocational schools is frequently based on a quota system whereby each sending high school is allotted a certain number of applicants both to the school and course programs within the school. In the absence of close supervision, the possibility of using such a quota system to exclude women from very popular, traditionally men's courses, such as automotive repair or construction trades, is high, and is one part of vocational education that merits close attention.

Interviews with vocational education administrators, teachers, students, and guidance counselors disclosed that key personnel often still adhere, consciously or unconsciously, to conventional sex roles.

Counseling, both formal and informal, often has a significant impact. In short, the preliminary reviews enable OCR to acquire first-hand knowledge about the operation of the schools and about potential areas of discrimination. The findings will help target and guide title IX enforcement efforts.

A second vital starting point in launching an effective compliance program is reliable survey data. Therefore, in January of 1974 a civil rights survey form was forwarded to approximately 700 secondary area vocational schools which provide instruction for students from regular high schools in a given area; 400 postsecondary technical institutes for persons who are beyond high school; and 400 community colleges having vocational education departments.

The schools were requested to report student enrollment by race, ethnic group, and sex for each course program offered. Similar data was provided in regard to faculty. In addition, the survey covered enrollment, by race and sex, in apprentice training programs.

With your permission, Madam Chairman, I would like to submit a copy of the survey form for the record.

Mrs. MINK. Without objection it shall be received.

[Form referred to follows.]

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Mrs. MINK. Without objection it shall be received.

[Form referred to follows.]

## REPORTING REQUIREMENTS

This report is required by Title VI of the Civil Rights Act of 1964 and by Title IX of the Education Amendments of 1972. Section 106(b) HEW Regulation 45 CFR 101 issued to carry out the purposes of Title VI of the Civil Rights Act of 1964 provides:

"Compliance Reports. Each institution shall keep such records and submit to the responsible Department of Education such compliance reports as such orders and to such form and containing such information as the responsible Department officials in its design may determine to be necessary. Such reports shall be submitted to the responsible Department officials in its design. For example, reports should have provided for the Department and other data showing the number of which members of minority groups are held in custody and participation in community service programs."

## INSTRUCTIONS

## CIVIL RIGHTS SURVEY OF AREA VOCATIONAL TECHNICAL SCHOOLS

WINTER 1974

Issued by  
U. S. Department of Health, Education and Welfare  
Office for Civil Rights

Washington, D. C. 20201

Telephone (202) 245-6574

**GENERAL INSTRUCTIONS.** The Winter 1974 Civil Rights Survey of Area Vocational-Technical Schools consists of one multiple report form. It has been printed as an original and four copies. When they have been filled out, return the Original and Copies 1 and 2 to the Office for Civil Rights, Send Copy 3 to the State Director of Vocational Education in your state. Keep Copy 4 as a School record.

Observe these instructions for filling in items 1 through 10.

- Item 1 Use the name of the School that your State uses in its published official listing of area vocational-technical schools. **NOTE:** If the area vocational-technical school is part of a community or junior college, use special notation in this item.
- Item 2 List the names and addresses of branch campuses that are under direct administrative control of the school named in Item 1.
- Item 3 Give the name of the principal making body which supervises the administration of the School, such as a community Board of Education, a Joint Vocational Education Board, consisting of several school district boards or a specially appointed committee, the State Board of Vocational Education, a Board of Trustees for the college or special school.
- Item 4 Mark the box or boxes that describe the levels of vocational education offered in the School.
- Item 5 Describe by postal address the geographic service area from which the School draws its students. Is the county, city, town, school district, reporting district? At the secondary level, name the high schools which send students to the School for full or part-time instruction.
- Item 6 Estimate the percentage of minority persons in the total population of the School's geographic service area. This figure may be based on U. S. Census data for 1970 or on current state and local records.
- Item 7 **STUDENTS IN VOCATIONAL-TECHNICAL PROGRAMS.** Report only number of students by sex in regular membership as of January 15, 1974 or the nearest convenient date in January. If school records are most complete and membership can be considered standardized. Report the student membership by ethnic group and sex. Report students on transfer, applies as part of total enrollment. Do not report student enrollment in part-time adult classes (i.e., evening programs). Be guided by the following definitions:

- Col. 1 American Indian: Persons considered by themselves by the school or by the community to be of American Indian origin.
- Col. 2 Black: Persons considered by themselves by the school or by the community to be Black or of African or Negro origin.
- Col. 3 Asian American: Persons considered by themselves by the school or by the community to be of Chinese, Japanese, or other Asian origin.
- Col. 4 Spanish Served American: Persons considered by themselves by the school or by the community to be of Mexican, Puerto Rican, Central American, or other Spanish origin.
- Col. 5 External individuals NOT included in Columns 1 through 4.
- Note: Columns 1 through 5 are considered mutually exclusive. Count an individual in one racial/ethnic category only.

The vocational-technical programs listed are those most frequently offered at area vocational-technical schools. Some schools may have other programs, but not necessarily offering regular student membership in them by ethnic group and by sex as of January 15, 1974. The table number names for VOCATIONAL EDUCATION AND OCCUPATIONS (O\*NET) July 1964 publication of the U. S. Office of Education. Write the names of programs not included in the School Manual listed on this form.

- Item 8 **STUDENTS IN APPRENTICE TRAINING PROGRAMS.** Write in the title of each course offered at the School under sponsorship of a local or state-regulated Joint Apprenticeship Committee. Report student membership by ethnic group and by sex as of January 15, 1974.
- Item 9 **INSTRUCTIONAL STAFF.** Report full-time instructional staff that are regular employees to teach the courses reported under Item 7. Report full-time instructional staff by program group. Secretaries, ASEN need not submit employee data if U. S. Census Bureau has been used.
- Item 10 **ADMINISTRATIVE STAFF.** Report full-time administrative staff whose primary duty is not in teaching. Include secretaries and clerical personnel. Do not include casual personnel.

**SPECIAL INSTRUCTIONS FOR COMMUNITY OR JUNIOR COLLEGES CONSIDERED AREA VOCATIONAL-TECHNICAL SCHOOLS.** These institutions should report only students who are regularly enrolled in vocational-technical programs leading to immediate employment. Do not include students in non-vocational-technical programs. Report faculty and administrative employees in the same way.

THIS REPORT IS  
DUE FEBRUARY  
28, 1974

**CIVIL RIGHTS SURVEY  
OF  
AREA VOCATIONAL-TECHNICAL SCHOOLS**  
Required Under Title VI of the Civil  
Rights Act of 1964 and Title IX of the  
Education Amendments of 1972  
U. S. Department of Health, Education & Welfare  
Office for Civil Rights, Washington, D. C.

OMB No. 34-6027  
Expiration Date: August 1974

This report is required pursuant to Title VI, Regulation 45 CFR Part 80, and is required for the purposes of Title VI of the Civil Rights Act of 1964, Section 80.6(b) of the Regulation provisions.

**Compliance Reports:** Each recipient shall keep records and submit to the responsible Department official or his designee timely, complete and accurate compliance reports as herein times and in such form and containing such information as the responsible Department official or his designee may determine to be necessary. The recipient shall submit to the responsible Department official or his designee a copy of this Regulation.

1. Name of Area Vocational-Technical School \_\_\_\_\_

Street Address \_\_\_\_\_ Telephone \_\_\_\_\_

City, State, Zip \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_

2. Name and Address of Principal (Superintendent) \_\_\_\_\_

3. Name of the governing body (e.g., Board of Education, State Board of Vocational Education, County Board of Vocational Education, Board of Technical Education) \_\_\_\_\_

4. Level: ☐ Elementary ☐ Junior High ☐ High School ☐ Post-Secondary ☐ Adult Evening ☐

5. Define the geographic service area (in which the school draws its students) i.e., the city, municipality, county, or school district, for secondary AVTS, or sending schools and school district wherein and by \_\_\_\_\_

6. Estimate the percentage of minority persons in the total population of the school's geographic service area as stated in item 5 \_\_\_\_\_

Students in Area Vocational-Technical Programs

Col. 1 American Indian		Col. 2 Black		Col. 3 Asian American		Col. 4 Spanish Surname		Col. 5 All individuals not in listed in Cols. 1-4		Col. 6 Totals	
M	F	M	F	M	F	M	F	M	F	M	F

Report the total number of students in regular membership in the school by race/ethnic group and by sex as indicated in 1974. Do not report those in part time adult classes.

Report the number of regular students enrolled in programs listed below by race/ethnic group and by sex as indicated in 1974. Do not report those in part time adult classes.

Vocational  
Code No.

PROGRAM TITLE

**AGRI-BUSINESS OCCUPATIONS**

01.01	Agricultural Production										
01.02	Agricultural Supplies/Services										
01.03	Agricultural Mechanics										
01.04	Agricultural Products										
01.05	Commercial Horticulture										
01.06	Agricultural Resources										
01.07	Forestry										
01.08	Agricultural Other										

Page 1

Original OFFICE FOR CIVIL RIGHTS

National Code No.	PROGRAM TITLE	American Index		Total		Foreign		AS AC Unusually Low		Total	
		M	M	M	M	M	M	M	M	M	M
MARKETING & DISTRIBUTION OCCUPATIONS											
11-101	Advertising Sales										
11-102	Advertising & Promotion										
11-103	Advertising										
11-104	Advertising Sales										
11-105	Advertising Sales										
11-106	Advertising Sales										
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11-200	Advertising Sales										

HEALTH OCCUPATIONS									
11-201	Dental Assistant								
11-202	Dental Hygiene								
11-203	Dental Laboratory Technology								
11-204	Dental Other								
11-205	Dentistry (Dental Radiology)								
11-206	Dentistry								
11-207	Medical Lab Assistant								
11-208	Hematology								
11-209	Medical Laboratory Technology								
11-210	Nursing								
11-211	Practical (Vocational) Nursing								
11-212	Nursing Assistant (Aide)								
11-213	Nursing Other								
11-214	Occupational Therapy								
11-215	Physical Therapy								
11-216	Radiologic Tech (Other)								
11-217	Radiologic Tech (X-ray)								
11-218	Radiologic Tech (X-ray)								
11-219	Radiologic Tech (X-ray)								
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HOME ECONOMICS									
11-301	Home Economics, Personal, Home and Family								
11-302	Child Development								
11-303	Criminology and Forensics								
11-304	Consumer Education								
11-305	Family Relations								
11-306	Food and Nutrition								
11-307	Home Management								

Vocational  
Code No

## BUSINESS AND OFFICE OCCUPATIONS CONTINUED

[illegible]

## TECHNICAL OCCUPATIONS

[illegible]

## TRADE AND INDUSTRIAL OCCUPATIONS

17-01	Air Conditioning Systems and Piping
17-02	Apparatus Repair
17-03	Belt & Chain Rep.
17-04	Auto Mechanics
17-05	Automotive Engine and
17-06	Automotive Servicing Tech.
17-07	Automotive Shop
17-08	Automotive Shop
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17-97	Automotive Shop
17-98	Automotive Shop
17-99	Automotive Shop
18-00	Automotive Shop

Vocational Code No.	PROGRAM TITLE	Col 1	Col 2	Col 3	Col 4	Col 5 All individuals included in Cols 1-4	Col 6
		American Indian M F	Black M F	Asian American M F	Spanish Surname M F	All individuals included in Cols 1-4 M F	Total M F

## TRADE AND INDUSTRIAL OCCUPATIONS CONTINUED

17 2303	Machine Tool Operators						
17 2306	Welding & Cutting						
17 2307	Tool & Die Making						
17 24	Metalurgy Occupations						
17 2601	Barbering						
17 2602	Cosmetology						
17 2699	Personal Services, Other						
17 27	Plastics Occupations						
17 2801	Freeman Training						
17 2802	Law Enforcement Training						
17 2899	Public Service Occupations, Others						
17 29	Quantity Food Occupations						
17 30	Refrigeration						
17 31	Small Engine Repair/ Internal Combustion						
17 32	Stationary Energy Sources Occupations						
17 33	Textile Production & Fabrication						
17 34	Leatherworking						
17 35	Lighting						
17 36	Woodworking Occupations						
17 99	Trade & Industrial Occupations, Others						

## OTHER PROGRAMS NOT LISTED ABOVE (Please list Code Nos. if known)


8 STUDENTS IN APPRENTICE TRAINING PROGRAMS  
With an apprenticeship training program, report in School Statistics  
and comment on any special circumstances and results.

Apprentice Training Course Title	TOTAL	American Indian M F	Black M F	Asian American M F	Spanish Surname M F	All individuals included in Cols 1-4 M F	Total M F

9 INSTRUCTIONAL STAFF  
Report full-time instructional staff. Do not include instructional  
staff teaching only on part-time adult classes.

Report full-time instructional staff by program as listed below	TOTAL	American Indian M F	Black M F	Asian American M F	Spanish Surname M F	All individuals included in Cols 1-4 M F	Total M F
Agri-Business Occupations							
Marketing Occupations							
Health Occupations							
Home Economics							
Business and Office Occupations							
Technical Occupations							
Trade and Industrial Occupations							

## 10 ADMINISTRATIVE STAFF

Report full-time administrative staff. Do not include  
custodial personnel.

	TOTAL	American Indian M F	Black M F	Asian American M F	Spanish Surname M F	All individuals included in Cols 1-4 M F	Total M F

CERTIFICATION: I certify that the information given above is true and correct to the best of my knowledge and belief.

Signature of Person Furnishing Information

Title

(Area Code) Telephone Number

Date Signed

Mr. HOLMES. More than 1,400 of the schools surveyed responded. In terms of revealing areas where sex discrimination may be a factor, the results can be summarized as follows:

1. 21 schools are single-sex institutions, serving either males or females exclusively.

2. 132 schools have enrollments which are more than 80 percent of one sex. Of this number 70 schools enroll more than 90 percent of one sex.

3. More than 1,000 schools offer five or more vocational course programs which are attended solely by one sex.

4. Apprentice training programs are attended almost exclusively by males. Women represent less than 1 percent of the total enrollment in these programs.

5. Trade and industrial programs are attended almost exclusively by males. The representation of women in T. & I. courses, other than cosmetology, is less than 3 percent. Other programs are attended exclusively or predominantly by females.

The National Center for Educational Statistics has this data and is conducting a more detailed analysis of the data we collect which will, when completed, be available for public distribution. Without a hard statistical analysis of the results of our survey we have drawn two very broad conclusions from the data we have examined:

First, the number of single-sex institutions is quite small, but the number of institutions serving one sex predominantly is a matter of great concern. Most area vocational schools, however, appear to have a reasonable balance of men and women students.

The second inference is that although the admission policies of area vocational schools may not necessarily be discriminatory on their face, discrimination may exist with respect to admission to course programs. This situation may well be more prevalent at the secondary level area vocational school, where admission is influenced by allotting slots to various sending high schools. It is at the high school level vocational schools where single-sex courses seem to be most pronounced.

The comparative figures suggest that there is greater freedom-of-career choice and opportunity for minorities and women in post-secondary vocational education. This can be accounted for, I believe, by the singleness of purpose of postsecondary vocational institutes, a purpose which is to prepare people for jobs, now, whereas at the high school level, vocational education is one part of a total education program which serves a far broader function.

In light of the information and experience gained during the 11 preliminary reviews, and the survey data covering identified schools, OCR decided at the beginning of this fiscal year to schedule 40 onsite compliance reviews of area vocational schools. The purpose of the reviews is, of course to determine whether discriminatory practices exist, both in regard to race and sex. However, of the 15 reviews initiated or completed thus far, most have been primarily concerned with title VI issues, a pattern which, as I suggested earlier, will persist until the title IX regulation is approved and the broad legal requirements are finalized.

Publication of a final regulation will provide the basis for a more comprehensive approach in vocational education and OCR experts, during the existing planning process for fiscal year 1976 activity, to undertake additional compliance reviews in this area.

While most efforts have been directed to the review of area vocational schools, we recognize that these institutions comprise only a percentage of vocational education programs. Since 1973, as part of the annual fall survey of elementary and secondary school districts, we have gathered data on the number of courses where enrollment is predominantly single sex. Many of these courses are probably vocational education courses, and will receive closer scrutiny in the future.

At the same time there will always be limitations in regard to OCR's ability to reach on a firsthand basis the vast majority of some 20,000 separate institutions simultaneously. And the initial task of certifying the compliance status of a large number of institutions under title IX, to enable them to receive Federal funds, is staggering in itself.

For this reason we will be discussing, with the Office of Education, the advisability of developing more concrete guidelines applicable to State vocational education agencies. Such guidelines might, for instance, require the submission of plans under which the appropriate State officials agree to provide relevant data and to help in assuring the compliance of vocational schools under their jurisdiction.

In short, by means to surveys and initial reviews, OCR has come to realize the extent and nature of civil rights problems in the vocational education area. We believe that real and substantial progress in solving these problems will require a cooperative effort on the part of local, State, and Federal education and civil rights officials, and we are fully prepared to play a strong role in this endeavor.

That concludes my testimony, Madam Chairperson, and I will be glad to respond to questions.

Mrs. MINN. Thank you, Mr. Holmes.

Mr. Buchanan, would you have any questions to propound?

Mr. BUCHANAN. Thank you, Madam Chairperson.

Mr. Holmes, on page 1 you mention that OCR is developing the skills and tools necessary to field an effective compliance program. Would you elaborate on that please?

Mr. HOLMES. Yes. Tools, in terms of the survey data, basic survey data I mentioned in my testimony—we had not previously surveyed area vocational schools on a school-by-school basis and we felt that we needed this data and the survey form, Mr. Buchanan, that was submitted in the record, will indicate the nature of the questions that were asked in that data.

In terms of skills, we are developing internally a manual or manuals to assist our staffs in the types of questions in the areas of concern which we would like to follow up on in connection with reviews under title IX and we have undertaken, as I mentioned, a large number or a number of pilot reviews in five States and also the 15 area vocational reviews we conducted this year.

Mr. BUCHANAN. I wonder, do you have any plans for regional workshops or consultation programs with SEA and LEA to help them understand title IX regulations and what we require?

Mr. HOLMES. Yes. Not OCR solely, but in conjunction with the Office of Education. Once the title IX regulations have been finalized and issued, it would be our hope to meet with the States as well as local education officialships on a continuing basis to explain the requirements of the law to them.

We have, over the last several years, engaged in a great deal of such meetings. Following the publication of the proposed regulations last summer for title IX, the OCR held 12 public briefing meetings nationwide for the purpose of informing the public and the education officials.

I might indicate the public briefings were widely attended by State and higher education officials to brief them on the proposed regulations and to afford them an understanding of the proposed regulations so that we might receive some of their well-informed comments on the proposed regulations, but it is essential, as I mentioned, Mr. Buchanan, in the last paragraph of my testimony, with 20,000 institutions, it is essential for us to obtain the full and complete cooperation of State and local education officials.

Our hope is that there will be substantial voluntary compliance with title IX. We just do not have a staff of sufficient size to investigate on a continuing and routine basis every institution in the country.

Mr. BUCHANAN. You used the word "staggering" and it would appear to be not only in terms of the number of institutions, but in terms of the magnitude of the problem. We are dealing here not with the minority, but I believe the majority of the U.S. population. The typical situation is becoming that of a two-working-parent family and there are many women who are heads of households and responsible, not only for themselves, but for children. Yet from all the statistics that I have seen concerning this most critical area of vocational education, since most women do not go on for a college degree or advanced degree, it would appear that the magnitude of this problem is staggering in terms of a job that must be done, since all of the statistics point to a situation that is, on its face, very discriminatory.

Would you agree?

Mr. HOLMES. I don't think there is any question, Mr. Buchanan. I also think this is not just a civil rights problem, but it is also an educational problem and the problem of traditional sex role stereotyping. It is a very large job, I think when we hear testimony from people at NIE and vocational education at OEO, and it indicates the extent of the problem and the need to move on various fronts and not just from a civil rights compliance agency to address the problem and attempt to overcome it.

Mrs. MINK. If the gentleman will yield to the gentleman from Illinois so he might have his first series of questions and then I will return to you, Mr. Buchanan.

Mr. BUCHANAN. I will yield my time.

Mr. SIMON.

Mr. SIMON. I have one general question. I realize the basis of these hearings primarily is on sexual discrimination, but I gather that racial discrimination is a disappearing factor in vocational education, or is that an unfair inference from your testimony?

I would be interested in any reactions you might have.

Mr. HOLMES. I think it remains a problem. I think it is a problem that is being somewhat dealt with in the country. We have attempted, in the reviews of area vocational schools that we have undertaken, since we are at the schools and discussing matters with the school officials, to consider both our responsibilities under title VI, the non-discrimination requirements of Federal law based on race, as well as responsibilities under title IX.

We have found problems in a number of these schools with regard to race issues. I think our primary area is in the employment, on the employment side, Mr. Simon, with regard to minority faculty and instructors in vocational schools. I think the opportunities for minority students to enroll in vocational schools has increased significantly though in recent years.

Mr. SIMON. But there would appear to be a greater sensitivity in that area on the part of school administrators than there is in the area of sexual discrimination. Is that correct, or is that not an accurate statement?

Mr. HOLMES. I would be reluctant to attempt to characterize the degree of sensitivity of area vocational educators, but I think what we had had—well, we have had 10 years of experience under Federal nondiscrimination law in the area of race, title VI. Title IX is a relatively new law. The problems of race discrimination as a result of that, I think, have been more effectively addressed by the education communities than the areas of sex discrimination, of course. In enforcing title IX we are hoping to change that, and that there will be an increasing level of sensitivity to issues of sex discrimination.

Mr. SIMON. Thank you. I have no further questions, Madam Chairperson.

Mrs. MINK. Mr. Buchanan, do you have to leave or would you like to ask a few more questions? You may have another 5 minutes, if you wish, and then I will begin my series.

Mr. BUCHANAN. Thank you very much, Madam Chairperson.

On page 4, Mr. Holmes, you mentioned that the admission of students in the secondary level area vocational schools is frequently based on a quota system whereby each sending high school is allowed a certain number of applicants.

You say this merits close attention. What does OCR intend to do about it? Are you geared to move when the President signs?

Mr. HOLMES. The experience we have had, you will find an area vocational school may have five or six so-called feeder high schools and they accept or receive students from those high schools. When we have conducted the reviews, the limited number of reviews we have undertaken, thus far, at area vocational schools we have necessarily gone to the sending high schools, the feeder high schools, to interview faculties and school administrators and counselors at those schools to try to get a grip or better understanding as to the patterns that may emerge from the referrals or the recommendations by counselors in the sending high schools to students who may desire to go to an area vocational school.

So a part of our review is not just to focus on the area vocational school itself, but also to go to visit, talk with administrators and counselors at the sending high schools.

Mr. BUCHANAN. On page 10, you mentioned that States might help in assuring compliance of the vocational education schools. Are you proposing to shift some responsibility to the States and if so, are they equipped to carry out this kind of enforcement?

Mr. HOLMES. Well, the States, we sometimes forget that the State education agencies have frequently been a recipient of Federal financial assistance and thus each State has an obligation to assure nondiscrimination on the basis of race or sex.

One of our objectives, both in title VI and also in title IX areas, is to work more closely, cooperatively and, hopefully, more effectively with State education officials as we pursue the civil rights problems at the local education level in States. I do not think that the Federal Government can accede to the States, and that may not be the proper word, but turn our responsibilities over to the States, but certainly they can assist us in securing or carrying out the congressional intent in the race and discrimination area and we want to enlist their cooperation, not precluding an individual, of course, the right to complain directly or bring information directly to the attention of the Federal Government.

Mr. BUCHANAN. You have mentioned the magnitude of the problem, the number of students, your limited personnel and the fact that you are developing the skills and the tools to deal with an enforcement program. Are you doing anything at this point toward enforcing title IX or are you waiting for the President to sign?

Mr. HOLMES. We are, to a limited extent, Mr. Buchanan, enforcing title IX. We have acted on approximately 50 percent, I am advised, of the title IX complaints that have come to our attention and have resolved 50 percent of the individual complaints. In connection with these reviews that we undertook at area vocational schools where we saw problems that were clearly in violation on the face of the statute of title IX and we brought those problems to the attention of the appropriate school officials and they, in most instances, I think in all instances, moved to correct those problems.

We have not moved to the informal administrative enforcement or fund-termination stage with any school district under title IX and I am advised that, absent a procedural regulation for title IX, that we could not, but I have been pleased thus far with the extent of voluntary compliance that has been taken by educators when a title IX problem has been pointed out to them.

Mr. BUCHANAN. Well, that is very encouraging. I must say that I personally like that modus operandi. I felt in this whole area that educators are often not the most guilty parties and so long as you can get voluntary compliance, it seems to me that is the right route to go first, even with the establishment of rights.

I personally have found that a very good pattern so long as you are getting results.

Mr. HOLMES. It seems to help when somebody is aware of the fact that there is a sanction such as fund termination and that encourages compliance.

Mr. BUCHANAN. Thank you, Madam Chairperson.

Mrs. MINK. Mr. Hall, any questions?

Mr. HALL. No questions.

Mrs. MINK. I have a few questions I would like to direct on behalf of two members who are unable to be here. Mr. Pressler had been here earlier and had to depart for another committee and requested that I ask these two questions, which I will put together.

One question is, what specific action programs are there to get more women involved in programs such as diesel mechanics, and the building trades program, and another is what specific action programs are there to get more men involved in programs such as home economics?

Mr. HOLMES. Madam Chairperson, I may have to defer to my colleagues in the education arm of HEW, OE, and NIE on that where a great deal, I know, is being done presently in NIE in terms of studies and providing documents, options, what-have-you, papers of a technical assistance nature.

Our responsibilities in OCR have gone primarily to looking, in these area vocational schools rather, as to patterns that may develop in counseling, female students out of diesel mechanics, and what-have-you.

That is, I think, admittedly an extremely difficult area to deal with insofar as a compliance agency is concerned, to try to obtain the evidence or the factual information that would indicate that people are discriminatorily being discouraged from taking this type of course or those types of courses.

Thus far, with our limited experience, our focus has been on program descriptions and manual descriptions which might indicate the courses are for boys only or girls only and requiring them to drop such references from manuals and any other types of barriers that might be erected in a formal overt or blatant manner against females participating in a male course or males in a traditionally female course.

I would like to defer to OE and NIE in attempting to respond to specific programs in that area.

Mrs. MINK. I think Mr. Pressler's interest concerned what your office has done with respect to action programs to encourage the educational systems throughout the country to provide these programs and to adopt affirmative action. I don't think we are interested in studies and research and that kind of thing, but I think we are interested in compliance with the concept of open participation and equal opportunities, which I gather is your Agency's responsibility and not NIE and other agencies?

Mr. HOLMES. Yes, it is certainly our responsibility, Madam Chairperson. As I indicated in partial response to the question, our efforts in connection with reviews and where we note the classes, or course programs are exclusively male or female or predominantly so, are to point out to the school systems a possible compliance problem.

Mrs. MINK. How many such notices have you sent pointing out such possible violations of the law?

Mr. HOLMES. I could not say.

Mrs. MINK. Well, give us a rough estimate, 10, 100, 1,000?

Mr. HOLMES. We conducted reviews of five States of area vocational schools, as I mentioned in my testimony. We have conducted thus far, well, that was in fiscal 1974 and in fiscal 1975, we have conducted 15 area vocational technical school reviews and we have corresponded with institutions in those 5 States and with respect to 11 individual schools.

Our regional offices have, as I indicated, Madam Chairperson, resolved approximately 50 percent of the title IX complaints coming to their attention. Many of them may be in this area of the 112 complaints we received in the last 6 months of calendar 1974 by our Elementary and Secondary Division, title IX complaints, and approximately 40 to 45 percent of those complaints were resolved.

Mrs. MINK. So what is happening to the balance of the complaints, which in one case is 50 and the other case is 55 percent. What is the current overall status of the complaints which are not voluntarily resolved between your office and the system?

Mr. HOLMES. As I indicated, the complaints that have been investigated by us have, by and large, been voluntarily resolved. If they have not been voluntarily resolved, once the procedural regulations to title IX are finalized, we will move to administrative enforcement proceedings against those educational institutions.

Those complaints that have not been investigated by us thus far, we will attempt to investigate in connection with our general compliance priorities during fiscal 1976 and hopefully early, when we expect to have the final title IX regulations.

Mrs. MINK. Are you requesting school systems to develop affirmative action plans with regard to their vocational education programs?

Mr. HOLMES. The proposed title IX regulations do not require the development of proposed title IX regulations—rather, do not require development of affirmative action plans by educational institutions. They are consistent with title VI regulations which require, of course, remedial or corrective action plans to correct identified instances of discrimination and then permit the institutions to voluntarily adopt so-called affirmative action plans in order to overcome or to increase the levels of services provided on employment to women or minorities who previously had limited opportunities for participation in a school system.

To answer your question, to specifically answer your question, neither the title VI regulation that has been in existence for a number of years nor the proposed title IX regulation require educational institutions to develop affirmative action plans.

Mrs. MINK. In the case of the many thousands of complaints. I am sure your office has received with regard to sex discrimination—

Mr. HOLMES. May I correct you there, Madam Chairperson. we have not received many thousands of complaints. In the past or since title IX was enacted, we have received 254 sex discrimination title IX complaints in the Higher Education Division—this year in 1975, interestingly, in the higher education area there have been only 17 title IX complaints filed with the Office of Civil Rights.

In our Elementary and Secondary Education Division we received several hundred between July 1, 1974 and December 1974—we re-

ceived 112 complaints, so the level of complaints is not presently in the thousands. We anticipate, of course, when the title IX regulation is finalized, the level of complaints will substantially increase.

Mrs. MINK. With respect to your jurisdictional responsibility under the Civil Rights Act, have you not received thousands of complaints with respect to sex discrimination in the educational system?

Mr. HOLMES. No.

Mrs. MINK. Specifically in higher education?

Mr. HOLMES. You are including the Executive Order 11246?

Mrs. MINK. Yes.

Mr. HOLMES. Presently the level of complaints in that area, I think, is over the last several years about 500 or 600. I don't mean to argue on this point, Madam Chairperson, but I am saying that the level of sex discrimination complaints received by our office over the last several years has not, much to my surprise, reached the thousands level.

Mrs. MINK. How do you account for that? When we are told that EEOC is swamped by thousands of cases, how is it that your office is not involved in this issue and it is only coming to realize the extent and nature of our problem?

Mr. HOLMES. The Office of Civil Rights is very much involved in the issue, Madam Chairperson.

Mrs. MINK. Well, let me make my question more pointed. With respect to those complaints you have received, how many have ended in the termination of Federal funding to the institution involved?

Mr. HOLMES. Are you referring to title IX complaints?

Mrs. MINK. No, your overall responsibilities of all Executive orders and the Civil Rights Act.

Mr. HOLMES. No higher education institution has had its Federal financial assistance terminated as a result of sex discrimination complaints?

Mrs. MINK. Is this because no complaint was in your view considered justified?

Mr. HOLMES. No, not at all.

Mrs. MINK. What is the reason for failure to invoke this extraordinary relief?

Mr. HOLMES. The primary reason is once we have concluded there is discrimination in a case that, by and large, the discrimination is eliminated by the institution.

Mrs. MINK. Is this true in the cases I have been attempting to pursue with respect to the University of Hawaii?

Mr. HOLMES. I am not sure of all of the cases, Madam Chairperson, but I will be glad to submit for the record the status of those cases I am familiar with. I think the *Abramson* case, is that correct?

Mrs. MINK. Yes.

Mr. HOLMES. It is being handled by the Equal Employment Opportunities Commission.

Mrs. MINK. Under what circumstances was jurisdiction taken from your office and given to that Commission?

Mr. HOLMES. The EEOC had undertaken an investigation of the complaint and as a result of discussions between our regional San Francisco office and the regional EEOC office, it was concluded that

the EEOC would continue to prosecute the complaints although OCR had done an investigation and had reached a conclusion with regard to the complaints.

Mrs. MINK. Are we going to get into similar difficulties on jurisdiction in dealing with title IX?

Mr. HOLMES. I certainly think we will not in the nonemployment area, because the EEOC does not have any jurisdiction there. In the employment area there is need and we have already begun discussions with EEOC as well as OFCC at the Department of Labor to work out agreements to insure that one agency knows where the other one is and that there is not duplication of effort in the investigation of complaints.

Mrs. MINK. On this I am really very much interested in your concluding paragraph where you state that because of your surveys and reviews you came to realize the extent of the problem and that you are fully prepared to play a strong role in helping to correct this situation.

Could you amplify specifically what strong role you intend to follow?

Mr. HOLMES. Our role is to enforce the provisions of title IX, to conduct reviews of recipient institutions, to identify problems of sex discrimination, to call those problems to the attention of recipients, to get correction of the problem, and if there is a failure to correct it, move to terminate Federal financial assistance.

Mrs. MINK. Supposing an individual in a local school system believes there is sex bias in the educational policies of their local school system, what kind of grievance procedure is now provided under the regulations which have been submitted and how would that individual process that complaint in order to get your strong involvement so that the matter could be corrected?

Mr. HOLMES. There presently are no grievance procedures in place with regard to recipients of Federal financial assistance.

Mrs. MINK. With respect to title IX, the proposed regulation, what procedures are outlined?

Mr. HOLMES. In the proposed regulations there is no reference to grievance procedures. If you are referring to the final regulation that has been transmitted to the President by Secretary Weinberger, I with all due respect regret I am not prepared to discuss that document, which is an internal document, presently between HEW and the White House.

Mrs. MINK. Pardon, I didn't get your response.

In your view, there is no provision in the regulations that have been submitted to the White House covering title IX to deal with grievance procedures?

Mr. HOLMES. I said that in the proposed regulations published by HEW in June of 1974 there was no provision for grievance procedures.

Mrs. MINK. What is the current status of that issue with respect to the regulations that are now pending before the White House?

Mr. HOLMES. As an inadequate response to that question you posed, Madam Chairperson, I indicated I am not prepared, with all due respect and consideration—I am not prepared to discuss what is or

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Mr. HOLMES. As an inadequate response to that question you posed, Madam Chairperson, I indicated I am not prepared, with all due respect and consideration—I am not prepared to discuss what is or

is not in the title IX regulation, transmitted from HEW to the White House.

Mrs. MINK. I am informed it has been published in the Journal of Higher Education.

Mr. HOLMES. The title IX regulation that has been transmitted by Secretary Weinberger to President Ford, to the White House, has not been released publicly by the Federal Government.

Mrs. MINK. Why is that not released? Is it not public information?

Mr. HOLMES. Our attorneys advised us it is not. It represents an internal recommendation from the Secretary of HEW to the President, to the White House, and that once finalized, of course, it will be publicly released.

Mrs. MINK. I consider it highly irregular that regulations which are pending approval, and therefore pending final stages of promulgation, would not be considered public record, and it is my intention, certainly to pursue this matter.

It may well require some formal action on the part of the committee to request that these regulations be produced for the committee.

Mr. HOLMES. I might mention, Madam Chairperson, in that connection, and I alluded to it earlier when the proposed title IX regulation was issued by the Department on June 20, 1974, that the Department, in what I regard as a somewhat unprecedented move, extended the 30-day comment period to approximately 120 days to afford as many people in the public as possible to respond and provide their comments to the Department. The Department further conducted 12 public hearings in major cities throughout this country with the purpose of informing the public as to the provisions of the proposed title IX regulations, the result of that effort.

Mrs. MINK. Well, I am fully aware of that, but when final regulations are put together by the Department, I think the public is entitled to know what is going forward to the White House. I will pass that for the moment.

Mr. QUIE, any questions?

Mr. QUIE. Yes, I have a few.

Let me ask you, Peter, has anybody asked you about the Casey amendment adopted in the House bill?

Mr. HOLMES. Yes.

Mr. QUIE. Have you already answered that question?

Mr. HOLMES. No, excuse me—Mr. QUIE, nobody asked me here at this session.

Mr. QUIE. What if that is adopted by the other body, the Senate, and becomes law? One, what will it do to the regulations that are now in the White House? Would you have to draw them back and rework them again?

Second, what types of changes would you have to make in the regulations?

Mr. HOLMES. Congressman QUIE, the effect of the Casey amendment, as I read it, would be, one, to say that single sex physical education courses will continue to be permitted, and, two, that professional fraternities and sororities could continue to remain single sex organizations. But Congress, as you recall in the Bayh amendment last December, has written in exemption for social fraternities and sororities from title IX and it is part of the law right now.

That would be effective as of the Casey amendment. The proposed regulations had interpreted title IX as requiring the integration of physical education courses as well as professional and business fraternities and sororities. That was the position of the Department with regard to the proposed regulation.

We think that as a general matter there was a great deal of comment, not so much with regard to professional fraternities and sororities, but there was a great deal of comment regarding requirements for physical education classes and I think, as a general matter, without getting into the details of it, the final title IX regulation accurately and satisfactorily addresses many of the concerns. I think, raised by a vast majority of the House of Representatives in passing the Casey amendment.

Mr. QUIE. So the regulations already permit single sex physical education, is that what you say?

Mr. HOLMES. No, I didn't indicate that, Mr. Quie. I indicated I felt that without providing, or rather, with continuing to cover under title IX physical education courses, that the way the final regulation has been drafted, that we have adequately and satisfactorily addressed many of the concerns.

One of the concerns I understand that was being expressed is the covering physical education classes and the possible requirement for locker room facilities and showers to be integrated. Of course, under the statute itself there is an exemption for personal privacy and there has been no suggestion by the Department of locker rooms and showers and toilet facilities being integrated.

Mr. QUIE. But if the Casey amendment is adopted, you will in fact, have to change the regulations, is that not correct, because you do not permit single facilities?

Mr. HOLMES. We interpret title IX, Mr. Quie, as covering physical education classes in the proposed regulation and in the final regulations and I say that as a general matter. As I read the Casey amendment, it, in effect, says you exempt physical classes from title IX.

Mr. QUIE. So you would have to change the regulations to do that?

Mr. HOLMES. Yes, I think that is a safe assumption.

Mr. QUIE. How did you get into covering physical education in the first place? Is there any Federal support of physical education programs?

Mr. HOLMES. Is there any direct Federal support?

Mr. QUIE. Yes.

Mr. HOLMES. Well, for physical education programs, not to my knowledge, and this goes to the Carger point, the issue of the definition of a program or activity under title IX. Of course, the Department's position in the proposed regulation to title IX was that non-discrimination requirements of title IX applied, not only to those programs or activities receiving direct Federal financial assistance, but those programs or activities or extracurricular activities that were being administered by a federally assisted school system.

The theory, of course, is that, take a race issue, that an otherwise nondiscriminatory school system, say a program supported directly with elementary and secondary education funds, would not be truly a nondiscriminatory system if the student, or minority students rather, were prohibited from participating in physical education

courses or other curricular activities supported and sponsored by the school system.

Mr. QUIE. If the Congress cleared this matter up so you would only be permitted to have jurisdiction over programs that were directly funded by the Federal Government, would that result in substantial changes in your regulations?

Mr. HOLMES. I think that the answer is "yes." The proposed regulation, of course, addressed the entire education spectrum. It is not just specifically those programs directly receiving Federal financial assistance.

Mr. QUIE. Going on in your testimony, you mentioned that your plan has 40 compliance reviews of vocational schools. When you review those vocational schools, will you be doing that under title IX? Will that be the major focus?

Mr. HOLMES. It will be both titles VI and IX. I would like to mention here we would hope in our enforcement in order to develop a balanced enforcement program between race and sex discrimination issues, that as we identify recipients to review, we would be pursuing joint reviews and, while we are at a local education agency or at an area vocational technical school, attempt to review not only title VI national origin, but title IX sex discrimination issues, and when the final regulation is adopted, section 504 issues pertaining to the physically or mentally handicapped, which is a new jurisdiction that the Office of Civil Rights has received.

Mr. QUIE. Since you have selected 40, and there is a host of such schools, do you expect that review of the 40 will give you a pretty good picture of what the remainder is like and will have a salutary effect on the remainder? Or, will you only bring about changes in those 40 since I assume that all of them have problems with title IX at the moment?

Mr. HOLMES. I think the answer is "yes" to both questions. Congressman. An individual institutional review, of course, will have an impact on that individual institution. The information learned from undertaking that review will assist us as we go down the road in articulating perhaps more specific guidance to those types of institutions, that is, area vocational technical schools, and thus it will have a spinoff, a national type of effect as well.

Mr. QUIE. So far, have you required the States to give assurance of compliance under title IX when they send in their State plans for all of the schools that are going to be funded under the State plan?

Mr. HOLMES. No, not at this point. We cannot, the final procedural regulations, or the assurance form for title IX will refer to a commitment on the part of the recipient to comply with the title IX statute as well as the regulation and since the regulation has not been finalized yet, we have not sought to obtain yet formal assurances from the recipients.

Once the final regulation is in, we will be going through that process.

Mr. QUIE. You also, in your testimony, indicated the 21 schools that are single sex education and the 132 schools that have enrollments of more than 80 percent of one sex. Are those private vocational schools, or are they public as well?

Mr. HOLMES. I think they are all public.

Mr. QUIE. They are all public?

Mr. HOLMES. Yes.

Mr. QUIE. And how long a period of time will you be giving the 21 schools that are single sex education to become or to change to coeducational?

Then my second question is, what percentage will you want to bring those schools down to that are over 80 percent of one sex?

Mr. HOLMES. With response or in response to the first question, we would ask, I think, for single sex education schools to take immediate action. I might mention in that connection that a number of the schools have already been contacted. I know that the six single sex education vocational schools in the State of Massachusetts have been contacted through the State board of vocational education and have agreed to eliminate their single sex admissions policies effective this fall and thus two of the schools are presently admitting females and the remaining four of the six schools will be, for the first time, in September admitting females to those area vocational schools.

With regard to the question of what percentage would you expect area vocational schools to come to or reach in terms of male-female racial composition, that is an extremely difficult question to answer. That is without the Federal Government establishing some type of quota which we would not, of course, want to do.

I think that as a goal we would ask the schools to look to the racial and male-female composition of the feeder high schools. Many of the vocational high schools, I understand, are areawide and they are fed by five or six high schools in the area which will send students to that area vocational school for vocational education.

That is their primary source. This is at the secondary level, not postsecondary area vocational schools, but secondary high school level area vocational schools. That is their primary source of students, thus I think you would ask them to look at the male-female composition of the individual feeder high schools and hope to develop with them a plan which we would hope would have as an objective keeping some type of sexual balance, reasonable or approximate sexual balance in those area vocational schools.

What you are getting here is into a difficult area, as I mentioned before you came in. You get into issues of counseling, and they are free-choice type of schools and students elect to go to those schools and it is extremely difficult under those circumstances to develop any set percentages.

When you see a school that is 99 percent male, it raises a question. Frequently such schools publish course manuals and catalogs which are very blatant and overt in their sexism, strongly suggesting that the schools, and the nature of the programs available at the schools, are not available to the other sex students.

That I think clearly would be a violation. That then the school systems or area vocational schools would have to articulate clearly and disseminate clearly a nonsexist policy of admission to their institutions.

Mr. QUIE. Will you be using goals or ratios in your requirements, not quotas, but goals or ratios?

Mr. HOLMES. In connection with any type of civil rights review, Congressman Quie, we necessarily have to look at percentages. We look at percentages of minority or female population and look at percentages of minority or female population in the school and if there is substantial disparity, you ask the question, "What is leading to this disparity?" and as part of a corrective action plan we would often ask the school system to set as a goal, that their efforts rather be directed in attempting to eliminate the substantial disproportion between the number of females that might be enrolled in the school system and those that are being afforded opportunities to take a vocational or career-oriented type of course.

Mr. QUIE. In the first place, you mention 5,000 schools have programs that are attended solely by one sex. Will you be attempting to bring about the same ratio of sex in each of the courses that exist in the feeder high schools?

Mr. HOLMES. I don't think you can do that, Mr. Quie. One thing is to look at the total school itself and another is to look at the individual course offerings. I don't think that one could reasonably take the position that an auto mechanics course, for example, is going to be within a certain period of time 50 percent female or 50 percent male.

You have to, I think at the first level, assure yourself there is no overt or blatant description of that course as being for males only. At the second level, you have to look at the counseling process as best you can and it is a very difficult area from a civil rights standpoint to obtain evidence indicating the factual evidence rather, indicating whether there is or is not discrimination.

We would attempt to pursue these issues in terms of those cases, particularly in the early phases of enforcement of title IX that are clearly overt, blatant forms of sexism, as I say, where manuals or catalogs say, for instance, women or girls are discouraged from taking this course and are encouraged to take another course, and that influences the choices of the students.

I think the ideal situation we are looking for in any type of compliance reviews is that choices are not in a discriminatory manner influenced by officials of the school system or official communications of the school system.

Mr. QUIE. From what you say, you will use ratios and goals in schools, but not ratios and goals in the courses in schools?

Mr. HOLMES. No, necessarily in undertaking a civil rights review, we will look at ratios. In a school system where an area vocational school is 50 percent female and 50 percent male, and an auto mechanics course is 100 percent male or 99 percent male, the existence of those statistics are going to raise questions.

We will inform the school system that these are the statistics that you have and that we see. Why is this occurring? We will not ask them to set a goal or a quota that auto mechanics courses should be 50 percent female or 50 percent male. I don't think you can do that because that is going to rely on the individual choices of students.

When you look at the total composition of the schools, you run into the same problems. If the feeder schools of an area vocational

technical school are, say, 50 percent male and 50 percent female, and the area vocational school is 99 percent male, you introduce those statistics and it raises the question, are females having an opportunity, a nondiscriminatory opportunity to attend that area vocational technical school, and we would ask people on the basis of that statistical oversight to try to address the problems preventing the females from attending the area vocational school.

I want to make it clear for the record that we are absolutely not talking in terms of any set quotas. I don't think you can do that and I don't think you should do that. But the statistics are important. The statistical information that we gather in surveying these 1,500 schools is important in gaining at the first level of analysis, some understanding of the nature of the problems at these schools.

Mr. QUIE. Would I be correct that what you are after, that your use of ratios and goals, will be the same in courses as in schools?

Mr. HOLMES. That is right.

Mr. QUIE. Well, I have a question: How do you define "national origin"?

Mr. HOLMES. Traditionally the Federal Government has, or the Office for Civil Rights and many of the other Federal agencies, have broken down their racial categories for data collection purposes as so: black, Spanish surnamed, Asian American, native American, other. National origin minorities, by and large, were those groups that were not black or other. That is Spanish surnamed, Asian American or native American.

There is a broader definition, of course, of the national origin minority and that is any individual which, by virtue of their ethnic origin, may have been discriminated against. That could go for a Jew, it could go for a French-speaking Canadian living in Vermont, an Irish American, what-have-you, but by and large the focus, of course, of the Federal civil rights effort, which we think has been congressional intent, in the last 10 years, has been on those substantial or large minority groups such as the blacks, Spanish surnamed, Asian American and native American.

Mr. QUIE. Could you submit for the record your listing?

Mr. HOLMES. Yes, I will be glad to.

Mr. QUIE. With all of the subgroups that fit within them?

Mr. HOLMES. Yes. I was just advised. Mr. Quie, the major groups are on the form that we utilized in conducting the survey of 1,500 area vocational technical schools and which I previously inserted in the record.

Mr. QUIE. But the form does not list all of the subgroups, does it? The subgroups come after they are listed in the "other," isn't that correct?

Mr. HOLMES. Yes. We do not receive statistics in our surveys, Mr. Quie. That is, we do not receive statistics in our surveys on anything but black, Spanish surnamed, Asian American, and native American, and then the broad sixth category is "other." We do not receive or analyze subgroup statistics in that "other" category, but it is just reported to us as, this is the group of individuals in our school system that does not fall into these other four categories, so it would be somewhat difficult to try to outline or delineate any subgroup.

Mr. Quie. Is someone other than you doing that? Because I have seen listed all of the groups that are included in that "other" category.

Mr. Holmes. Not to my knowledge. I will be glad to check and supply for the record what we can obtain on that. There are a number of agencies, of course, in the business of collecting this data that it may well be that EEOC or the Labor Department has done such.

[Information requested follows:]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,  
OFFICE OF THE SECRETARY,  
May 20, 1975.

MEMORANDUM

To: Subcommittee on Elementary, Secondary and Vocational Education, Committee on Education and Labor, House of Representatives.

From: Peter E. Holmes, Director, Office for Civil Rights.

Subject: Additional information requested April 28, 1975 during hearings by subcommittee member, Honorable Albert H. Quie (R-Minnesota.).

The answer to Mr. Quie's questions on radical/ethnic categories divides into two parts: (1) The categories used by OCR in its own surveys, and (2) the efforts the Director, OCR is making in his additional capacity as Special Assistant to the Secretary for Civil Rights to assist the remainder of the Department to produce base-line, survey and program statistics which can be used to analyze the manner in which the Department is meeting its responsibility to those groups which have been the victims of historic discrimination.

Answering the first part, the Office for Civil Rights is now bound, in its own surveys, and for a period of approximately one year from last April, to use the categories and definitions set out in a memorandum from the Office of Management and Budget dated April 15, 1975, a copy of which is attached.

In this context, the question of sub-groups does not normally arise. For example, because the Hispanics have been the victims of discrimination without regard to the questions of whether they were Chicanos, Puerto Ricans, Cubans or persons originating from other countries of the Hispanic world, it normally suffices for OCR purposes to collect statistics on Hispanics, including all of the possible sub-groups. On the other hand, were OCR to receive a complaint under Title VI alleging discrimination on account of national origin, because a grantee was servicing Puerto Ricans on a preferred basis, to the detriment of Chicanos, OCR, in the course of investigating and resolving the complaint, would have to deal with the various sub-groups of the general Hispanic category.

Turning to the second part, the Office for Civil Rights has taken the lead in an effort being undertaken under the aegis of the Federal Interagency Committee on Education (FICE), which, last summer, established an *ad hoc* committee on racial and ethnic categories. The *ad hoc* committee reported to FICE on April 23, 1975 and its recommendations do not differ significantly from those in the OMB memorandum, which was itself largely based on the *ad hoc* committee's recommendations.

In this context, all agencies are free, if they wish, to split the five major groups into as many sub-groups as they wish provided only that the array used can be collapsed back into the five categories. The category of "Asian and Pacific Islander," for instance, can be subdivided into Chinese, Japanese, Korean, Phillipino, Hawaiian, Samoan and as many additional sub-groups as the interested agency wishes to examine separately. It is, however, required, that the agencies proceed in such a manner that all of the sub-groups can be totalled back into one compatible "Asian and Pacific Islander" group. This means in practice, that they must include an "other Asian and Pacific Islander" sub-group, so as to avoid pushing anyone properly includable in "Asian and Pacific Islander" into one of the other major groups. Similarly, the "American Indian and Alaskan Native" can be subdivided into American Indians, Eskimos and Aleuts, and the American Indians among them can be further subdivided by tribe, so long as the possibility of totalling the category remains unimpaired.

Attachment.

EXECUTIVE OFFICE OF THE PRESIDENT,  
OFFICE OF MANAGEMENT AND BUDGET,  
Washington, D.C., April 15, 1975.

Reply to attn of: SPD/PDPianchon.

Subject: Standard Racial/Ethnic Categories and Definitions.

Mr. NORRIS W. SYDNOR,

Director, Office of Government Relations,  
Department of Health, Education, and Welfare.

A meeting was convened on April 11, 1975 for the purpose of obtaining final agreement on the standard application and usage of racial/ethnic categories and definitions to be utilized by the Equal Employment Opportunity Commission (EEOC) and the Office of Civil Rights (OCR), Department of Health, Education, and Welfare, for all compliance reporting and recordkeeping requirements of the two agencies. The lack of such standardization has been the source of mounting criticism of the Executive Branch by members of the public and the Congress. In attendance at the meeting were representatives of the EEOC, the OCR, the General Accounting Office, and the Office of Management and Budget.

Agreement was reached on a standard set of racial/ethnic categories and definitions. The categories and definitions are consistent in concept with those recommended by the Ad Hoc Committee on Racial and Ethnic Definitions of the Federal Interagency Committee on Education (FICE); any differences constitute only minor revisions in nomenclature and description. The recommendation of the Ad Hoc Committee represents the combined efforts of numerous Federal agencies to coordinate the development of common definitions for racial and ethnic groups to be used by all agencies in the collection of educational data.

The categories, definitions, and lead-in paragraph which were agreed upon follows:

Race/ethnic designations as used by the (agency name) do not denote scientific definitions of anthropological origins. For the purpose of this report, an employee (student) may be included in the group to which he or she appears to belong, identifies with, or is regarded in the community as belonging. However, no person should be counted in more than one race/ethnic group.

**American Indian or Alaskan Native**

A person having origins in any of the original peoples of North America.

**Asian or Pacific Islander**

A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

**Black, not of Hispanic Origin**

A person having origins in any of the black racial groups.

**Hispanic**

A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race.

**White, not of Hispanic Origin**

A person having origins in any of the original peoples of Europe, North Africa, the Middle East, or the Indian subcontinent.

This set of five mutually exclusive and exhaustive categories represents the minimum number of categories to be used. The five basic categories may be subdivided into more specific subgroups as required by agency needs, as long as the integrity of the original categories is maintained. If the subclassification does not include an exhaustive set of subcategories, one subgroup should be labeled, "Other (name of category)" or "Other (specify) \_\_\_\_\_," depending on the purpose of the survey.

The utilization of the standard categories and definitions extends to all reporting and recordkeeping requirements for which "observer identification" is suitable. This agreement does not extend to surveys which depend on respondent "self-identification." As a minimum first step, all equal employment opportunity and civil rights compliance reporting required by EEOC and OCR of education institutions during the 1975-76 school year will utilize this standard reporting

terminology. All other surveys of the two agencies in which observer identification is appropriate will be made compatible with this format as they are scheduled. Furthermore, it is the intention of OMB/SPD to extend this agreement to all Federal administrative program reporting as soon as appropriate concurrence has been obtained.

A meeting will be convened in approximately one year to review any problems the agencies have encountered in implementing these categories and definitions. All parties expressed the hope that few, if any, revisions, would be required at that time.

In Attendance: Melvin Humphrey, EEOC; Joachim Neckere, EEOC; Odessa M. Shannon, EEOC; Dave Fisher, GAO/RRR; Norman Heyl, GAO/RRR; John Hodgdon, HEW/OCR; John Hope II, HEW/OCR; Norris W. Sydnor, HEW/OCR; Frank E. Well, HEW/OCR; George E. Hall, OMB/SP; Paul Planchon, OMB/SP; Milo Sunderhauf, OMB/SP.

GEORGE E. HALL,  
Chief, Social Statistics Branch,  
Statistical Policy Division.

Mr. QUIE. Thank you.

Mrs. MINK. Mr. Jeffords.

Mr. JEFFORDS. Mr. Quie has adequately covered my area of questions.

Mrs. MINK. Thank you very much. I have a couple of questions from Mr. Lehman, who had expected to be here by 10:30, but since he is not here, I would like to ask them. Once the title IX regulations are promulgated, do you have an adequate staff to handle this new responsibility?

Mr. HOLMES. We, at this point in time, Madam Chairperson, believe that through the first year of enforcement of title IX, with other authorities, that we have an adequate staff. I would be extremely reluctant to indicate now that we feel that it is adequate in the long term. We are requesting some additional staff, I might mention, in the fiscal 1976 budget.

Mrs. MINK. How many additional?

Mr. HOLMES. Total staff in the Office for Civil Rights is 62 additional, of which the larger percentage of that is for the section 504 program of the physically and mentally handicapped.

Mrs. MINK. With respect to the surveys you have conducted in the area of sex discrimination in vocational education, how many individuals were involved in these surveys, reviews of the area schools, and on those other things which you discussed?

Mr. HOLMES. Are you talking about staff?

Mrs. MINK. Professional staff, how many were involved in conducting the surveys that you testified to?

Mr. HOLMES. In conducting the surveys, it has been primarily done by two individuals in our Elementary and Secondary Education Division.

Mrs. MINK. From the Washington office or from your regional areas?

Mr. HOLMES. From the Washington office.

Mrs. MINK. Have any of the regional staff individuals been involved in this survey?

Mr. HOLMES. Yes. If I can just clarify terms, Madam Chairperson, the survey, the construction of the survey form, the mailing of it out, receipt of it, and analysis of it, has primarily been

done by two people in the Elementary and Secondary Educational Division in Washington.

With regard to the on-site reviews that we have conducted of area vocational technical schools, they have involved representatives from our Washington office as well as from the regional office.

Mrs. MINK. How many individuals were involved in that review? Also, over what period of time?

Mr. HOLMES. About 20 individuals among our regional offices.

Mrs. MINK. Over what period of time?

Mr. HOLMES. That was done in the first 6 months of 1974, I believe. Approximately 20 people in the first half of fiscal 1975 rather were engaged in these onsite reviews of area vocational technical schools. I should note, Madam Chairperson, that that, of course, is a small part of the title IX activities that have occurred by our office, which has involved the better part of our elementary and secondary education staff as they have followed up as best as possible on complaints and conducted some pilot reviews in the title IX area nationwide.

Mrs. MINK. In the forthcoming fiscal year, how will these individuals be further engaged in this area of vocational education? Are they going to continue their reviews of other area schools and continue in the collection of further data and the conducting of additional surveys, or, as far as you are concerned, has this aspect of the work been concluded?

Mr. HOLMES. No. By no means has it been concluded. We had projected some 40 AVTS reviews in fiscal 1975. We will not be able to complete all of those. We will continue those into fiscal 1976 and there is, without question, a great deal more work that must be done by our office in this area.

We have simply taken a first look, if you will, at the nature of the problems and the statistical information. I think that we will have to, or we are in discussions with the National Center for Educational Statistics, and I think there is an ongoing need for collection of data regarding area vocational technical schools.

Mrs. MINK. Well, if there are no further questions we thank you very much, Mr. Holmes, for your testimony and for your cooperation in responding to the inquiries. I might suggest that there were other Members who wanted to be here, but could not revise their schedules when we had to recess this morning, and it may be they would want to forward further inquiries to your office. I would request your cooperation with such inquiries, which will be included in the record—the questions together with your responses.

Thank you very much, Mr. Holmes.

Mr. HOLMES. Thank you. We will be glad to respond to any and all questions.

Mrs. MINK. The next witness is Dr. William Pierce, Deputy Commissioner for Occupational and Adult Education. Dr. Pierce, the statement indicates, is accompanied by Mr. Charles Cooke, Jr.

Mr. PIERCE. Mr. Cooke could not be here and I am accompanied by Ms. Sue Hause.

Mrs. MINK. You may proceed.

**STATEMENT OF WILLIAM F. PIERCE, DEPUTY COMMISSIONER FOR  
OCCUPATIONAL AND ADULT EDUCATION, U.S. OFFICE OF EDUCA-  
TION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,  
ACCOMPANIED BY SUSAN HAUSE, SPECIAL ASSISTANT TO THE  
DEPUTY ASSISTANT SECRETARY FOR LEGISLATION (EDUCATION)**

Dr. PIERCE. Thank you, Madam Chairperson and members of the subcommittee. I welcome the opportunity to appear before this distinguished subcommittee to discuss sex discrimination and sex stereotyping in vocational education. My testimony this morning will focus on our perception of some of the most serious problems encountered by women in vocational education; our past and present efforts to solve these problems; and our future plans for additional action to eliminate all sex discrimination and stereotyping from vocational education.

We are aware of many existing problems concerning enrollment of females in vocational programs. Some of these problems are:

One: The concentration of women in four occupational areas—health, consumer and homemaking, gainful home economics, and office occupations—and generally in the lower paying segments of these occupations.

Two: The lack of flexible scheduling of programs which would offer women, particularly those who are heads of households and/or have preschool or schoolaged children, the opportunity to enroll in higher level skill training programs.

Three: Guidance counselors and guidance materials which promote sex stereotyping.

Four: The traditional attitudes in our society, which are often reflected in our schools, that it is neither appropriate, important, or necessary for women to participate in traditionally male-dominated education programs.

As I am sure most of you are aware, these and other problems often make it difficult for women to enter traditionally male dominated vocational programs which are of the greatest interest to women, which afford them the greatest opportunity for career advancement, and which pay the highest wages. Several recent studies, such as Project Baseline's report, "Women in Vocational Education", which our office funded, the study of the "Characteristics of Students and Staff, 1972" developed by the National Center for Education Statistics, and the survey taken in January 1974 by the Office for Civil Rights among area vocational schools, which Mr. Holmes has testified about at length, provided additional information and verified what we knew, that we still face serious problems in providing an equal opportunity for all students to receive vocational training.

Having recognized some of the basic problems which confront us, I would like to turn our discussion to the bureau's initial efforts to correct some of these problems. First: We are trying to improve our data collection efforts on women in vocational education. The Bureau is planning to reinstate data collection on enrollment by

occupation and sex in vocational education. When the National Center for Education Statistics began the Characteristics Survey, we concurred with OMB that, to avoid duplication of effort, we would collect sex data in only one data-gathering effort—the Characteristics Survey rather than our regular report forms. Given increased concern with this problem, we are requesting OMB to consider adding an item regarding enrollment by sex and race on our report forms, as they are submitted annually and NES data are collected only every 4 years.

Also to gain information about the status of women in vocational education, we recommended last August that the assessment of educational equity in secondary vocational education programs be initiated by the Office of Education. As a result, the National Center for Education Statistics is including vocational education in its three studies, which will review and analyze existing information relating to sex discrimination in: (1) employment practices in educational institutions, (2) the availability of appropriate guidance and counseling services, and (3) access to various types of post-secondary education, including occupational and technical programs.

Second: We are trying to make more students, both men and women, aware of the wide range of jobs performed by people in the work force and the job-training opportunities available through vocational programs. Efforts in this direction include two projects funded with part I curriculum funds. One project, "The Kingdom of Could Be You," which is a film, was designed to give preschool and primary school children a greater awareness of jobs through a series of television cartoon films. Another project is using the characters from "Peanuts" in the development of filmstrips, cassettes, instructional pamphlets, and films concerning various careers. These instructional materials are being produced for several grade levels, from kindergarten through adult. This project is still in progress and is being carefully monitored to avoid any sex stereotyping of career information.

Third: We are addressing the problem of uninformed or insensitive guidance counselors who perpetuate or promote sex stereotyping. The National Institute of Education is doing considerable significant research in this area. Our bureau will be exploring with NIE the possibility of using these materials in our programs once they are available. In a related area the Bureau has funded a research project with part C discretionary funds to examine factors in 10 urban schools and communities which lead to an acceptance of women in traditionally male-dominated programs. This project was testified to at length at the last hearing by Dr. Kaufman from Pennsylvania State University.

Another research project is assessing and field testing career planning and development approaches for adults, with a focus on ethnic minorities and women. This project will produce a series of manuals describing the features of each of the programs.

A related problem exists among the general public and especially among some employers and unions who hesitate to either hire women

in jobs not traditionally held by women or who are reluctant to admit women into certain apprenticeship programs. This represents an obstacle to any vocational education effort to eliminate sex discrimination. We believe this has resulted in relegating women to lower paying jobs and excluding them from the higher paying apprenticeship trades. This is a particular problem, since more women out of economic necessity are now seeking to enter the higher paying occupations. The economic need of women to do so is verified by the fact that two-thirds of all women who work are either single, divorced, widowed, or separated, or have husbands who earn less than \$7,000 a year.

While job development is not within the Department's purview, efforts we have initiated should facilitate solutions for overcoming this problem. As chairperson of the FICE Subcommittee on Education and Work, I will be directing the subcommittee to examine the barriers which prevent young people, especially women, from gaining valuable work experience in certain occupational areas. In addition, a Bureau staff member will represent the Bureau's position on apprenticeship and equality of opportunity for women in these programs as a member of the Department of Labor's Federal Committee on Apprenticeship Training. Also, contact has been made with the Women's Bureau of the Department of Labor to facilitate the participation of regional vocational education staff in some of the activities concerning apprenticeships which are sponsored by the Women's Bureau.

Fourth: We are trying to encourage the full participation of women as administrators in vocational education. As a general effort in this direction a position paper entitled "Women in Administrative Positions in Public Education," prepared under part A of the Education Professions Development Act, explores the problems encountered by women in public education. This publication is being sent to professional groups and others active in the field. In addition, the Bureau has cosponsored during 1972-1973 and 1973-1974 a series of regional seminars and workshops on women in the world of work for vocational education leaders to further the equity of women in education and employment. The report resulting from these seminars and workshops made recommendations to correct discrimination against women in education and employment. Then the report was disseminated nationally to educational leaders.

Indicative of the lack of full participation of women as vocational educators is the lack of a balanced representation of women on vocational education advisory committees, whether at the national, State or local level. This inadequate representation increases the likelihood that the unique problems women encounter in career preparation and employment will not be considered. Consequently, on March 10 the Commissioner sent a letter to the State officials responsible for appointing State advisory council members, asking that special consideration be given to the fact that nationally only 15.8 percent of State council members are women.

At this point I want to turn my attention to a discussion of the administrative actions I have taken to heighten the awareness of vocational education administrators to the urgent need to respond fully to the concerns of women for equal opportunity in vocational education.

In terms of our own staff, we recently held a series of orientation sessions for all Bureau staff concerning the proposed title IX regulation, so that, as they carry out their responsibilities, these individuals will fully be aware of the law and cognizant of its importance and what they can do to implement its provisions.

The Division of Vocational and Technical Education, on January 18, 1972, sent a program memorandum to State boards for vocational education, State advisory councils on vocational education, and regional and headquarters staff reaffirming our commitment to equal opportunity.

On February 6 of this year I sent a memorandum to regional directors of vocational education and each staff member of the Bureau, directing them to review all regulations, program guides, curricula under development with Federal vocational funds, and other educational materials and activities which fall under their area of responsibility in an attempt to eliminate any discriminatory connotation, stereotyping or discriminatory practices based upon sex.

On February 12 of this year I sent to all State directors of vocational education and all directors of community colleges the comments on proposed regulations on State programs in vocational education developed by the Women's Rights Projects of the Center for Law and Social Policy.

Finally, the State directors of vocational education will be in Washington on May 12 and 13 for their annual meeting. One of their task forces will focus on sex stereotyping in vocational education.

The Bureau will continue to address these and other problems encountered by women in vocational education programs. Thank you again for giving us the opportunity to appear today. I will be happy to answer any questions you may have, or the committee members may have at this time.

Mrs. MINN. Thank you very much, Dr. Pierce.

One of the matters that has been discussed quite frequently by witnesses and which has been the subject matter of questions by Mrs. Chisholm to other witnesses relates to the collection of data, which we understand, because of OMB intervention was curtailed. I think all of us on the committee realize the importance of data collection. We would like to know what your plans are with respect to resumption of this data collecting and whether you believe that if we provided in the legislation a mandate for such collection, that this would assist you in the administering of your responsibilities?

Dr. PIERCE. In response to the last part of that question, Madam Chairperson, I personally don't feel a mandate is necessary. I have discussed this issue with representatives of OMB. They are very sensitive to the current problem and I think they will be receptive to

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Dr. PIERCE. In response to the last part of that question, Madam Chairperson, I personally don't feel a mandate is necessary. I have discussed this issue with representatives of OMB. They are very sensitive to the current problem and I think they will be receptive to

whatever forms we submit to them, so long as they don't feel that the efforts are duplicative, and clearly they will not be, since nobody else we know of is collecting the data except every 4 years.

We have submitted to our own internal forms clearance process group, the set of forms that are used in the annual collection of enrollment data in vocational education. The collection of enrollment data in vocational education. The collection of enrollment by sex and by specific occupation is included as well as information by race.

I think we need to discuss those forms a little more based on the last hearing. They don't at this time include collection of data by race and occupation. They collect data by sex by occupation, but not by race by occupation, and that was a recommendation made by the panel at the last hearing.

I would like to go back and review those forms and see if it is possible.

The other issue of the question of national origin has not been addressed in these forms and I think we need to look at that. I am not suggesting, or don't want to suggest at this moment, Madam Chairperson, that we definitely will try to collect data by national origin. I am not sure we can, but I think it is incumbent upon us to reassess and reanalyze that.

Mrs. MINK. What was the precise reason for the termination of this data collecting?

Dr. PIERCE. As I said in my testimony, the National Center for Education Statistics had begun a survey of student and teacher characteristics in vocational education and OMB suggested to us, since NCES was collecting that data, it was duplicative for us to do that and, therefore, we ought not to do it.

OMB is very concerned, as I am, as a former State official, about the amount of data that the Federal Government does ask the States to provide. It is a continuing problem that the States have to face.

In the final analysis, when you collect data, you really are going to the local level. So that we always ought to be very concerned about added burdens of data collection at the local level. Therefore, the Office of Education concurred with OMB's recommendation that we could get what we needed from that survey.

In retrospect, since that survey is only, as I said, conducted every 4 years, it did not provide us with data we needed in this area and we propose to include it again.

Mrs. MINK. Is the data collecting done by the statistics center going to be discontinued or will it continue in its regular 4-year cycle?

Dr. PIERCE. Insofar as I know at the moment, that will continue as well. I am not sure I can really discuss that fully. That operation, as you know, has been removed from the Office of Education and is now part of the Assistant Secretary of Education's office.

So I have not had a chance to really discuss that. It may well be appropriate for both NCES and us to continue to collect that data.

Mrs. MINK. Another matter of general concern to those of us who are most unhappy at the lack of progress in HEW with respect to recognizing our problems is the lack of fiscal support. Everyone who has come to testify before this subcommittee indicates grave concern about these problems and generally recognize them as serious, yet when you look at the dollar figures, which presumably should represent the degree of recognition of our problems, there has been very little that has been set aside in this area.

The two projects that you mentioned are only two out of many, many projects which were funded by the Office of Education. Is this the level of interest we can expect in the future on the part of OE with respect to our problems?

Dr. PIERCE. I think not, Madam Chairperson. We have in the new legislation proposed that one of eight legislative and national concerns for which \$160 million would be spent would be in the area of elimination of sexual stereotyping. If that provision in our legislative proposal is successful, then certainly a great deal more money or resources will be spent.

We have not done, as members of the panel suggested last time, we have not suggested in our new legislative proposal that 10 or 15 percent of the funds be set aside for elimination of sexual stereotyping.

I think this problem will be resolved by virtue of the proposal that we now have in effect rather than by a mandated set-aside. The administration's policy or position in that regard has been to try as best we can to eliminate set-asides. That would certainly be inconsistent with that overall general policy.

The other thing we will do and can do, Madam Chairperson, is to stress the issue, not so much in terms of funding, but as we have done in the EPDA program. That is part of the educational professional development program dealing with training of administrators in vocational and technical education, and when that program started in 1970 there were 20 females in the program, representing 12.5 percent of the total enrollment.

Through a number of actions, covert and overt on our part, insofar as we can be overt in demanding that certain things happen through rules and regulations and funding criteria, in 1974 that percentage has increased to 46—rather, 42.4 percent, or more than a 300 percent increase.

We are simply impressing upon the 28 institutions that are running those programs that females or more females must be enrolled. By virtue of that program, we now have about 400 women who are trained as educational administrators in vocational education, many of whom are already in leadership positions who, by virtue of their being there will certainly help to overcome this problem.

Mrs. MINK. On the figures you just related, can you give us a percentage or general range of percentage of the numbers outside of the field of home economics?

Dr. PIERCE. I can, but I don't have that data with me. I will be happy to supply it.

Mrs. MINK. Submit it for the record and without objection it will be inserted at this point.

[Document referred to follows:]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,  
OFFICE OF EDUCATION,  
Washington, D.C. April 23, 1975.

HON. CARL D PERKINS,  
Chairman, Committee on Education and Labor, Subcommittee on Elementary,  
Secondary and Vocational Education, Rayburn House Office Building,  
Washington, D.C.

DEAR MR. PERKINS: The enrollment data I promised to the Committee on Education and Labor is hereby submitted:

ENROLLMENT IN VOCATIONAL EDUCATION, FISCAL YEAR 1974 (TENTATIVE)

	Enrollment	Percent
Agriculture.....	962,034	7
Distribution.....	823,264	6
Health.....	499,267	4
Consumer and homemaking.....	3,172,378	24
Occupational home economics.....	477,021	4
Office.....	2,689,547	20
Technical.....	391,482	3
Trades and industry.....	2,768,136	21
Special programs.....	1,602,171	12
Total (unduplicated).....	13,235,314	100

The 1974 total enrollment of 13,235,314 is an increase of 1,163,865 over FY '73, and an increase of 4,441,354 over FY '70, the first year of operation under the 1968 amendments to the Vocational Education Act.

The computer print-out for 1974 is not available at this time, so the hand calculations above are described as tentative figures, although they are not expected to change appreciably.

If you need additional information, do not hesitate to let me know.

Sincerely,

WILLIAM F. PIERCE,  
Deputy Commissioner for Occupational and Adult Education.

DISTRIBUTION OF FEMALE EPOA SECTION 552 LEADERSHIP DEVELOPMENT AWARDREES BY PRIOR OCCUPATIONAL SPECIALITY AND PERCENT OF TOTAL

Prior occupational speciality	Fiscal Year 1971- 73-3-yr doctoral program	Fiscal Year 1973- 1-yr program	Fiscal Year 1974- 1-yr program
Agriculture.....			
Home Economics.....	9	32	
Trade and Industrial.....			
Business and Office.....	9	26	
Distributive.....	1	3	
Technical.....		2	
Health Occupations.....	5	5	
Trade and Industrial.....			
Industrial Arts.....			
Guidance and Counseling.....	4	9	
Adult Education.....	4	2	
Supervision/Administration.....		18	
Special Education.....		2	
Teacher Education.....		16	
Career Education.....		4	
Academic Supporting.....			
Total female.....	32	115	147
Total male and female.....	230	286	347
Percent female.....	13.9	40.2	42.4

\* Required, generalized USOE data collection form did not secure these data.

\* Home economics 3, guidance 3, business and office 1, and special education 1.

\* Home economics 6, business and office 4, health 2, adult 2, distributive 1, and academic supporting 1

Dr. PIERCE. If it would help, and I think I can anticipate a question, I would also submit, insofar as we can, what occupations, what particular positions these women have been able to secure.

Now, there will be many in vocational home economics, because they came from home economics and asked to be trained in home economics, so they will certainly be there, but I think you will see some encouraging signs of women in nontraditional administrative roles as well.

MAJOR FIELDS OF STUDY IN WHICH AWARDEES HAVE COMPLETED DEGREE PROGRAMS, 1974-75 PARTICIPANTS

	Total awardees	Male	Female
Distributive education .....	19	15	4
Business education .....	47	20	27
Agricultural education .....	11	11	0
Home economics education .....	45	1	44
Industrial education .....	65	64	1
Industrial arts .....	14	14	0
Guidance and counseling .....	19	11	8
Vocational education .....	36	29	7
Secondary education .....	4	4	0
Technical education .....	7	7	0
Adult education .....	4	2	2
Occupation education .....	6	6	0
Specialist .....	1	0	1
Nursing .....	3	0	3
Chemical education .....	1	1	0
Elementary education .....	3	1	2
Political science .....	1	1	0
Psychology .....	6	1	5
Drafting .....	1	1	0
Nutrition .....	2	1	1
Education .....	14	10	4
Sociology .....	2	1	1
Higher education .....	1	0	1
Social studies .....	5	4	1
English .....	3	0	3
Math .....	4	3	1
Speech .....	3	0	3
Art .....	1	0	1
Health .....	2	0	2
Theology .....	1	1	0
Anthropology .....	1	1	0
Special education .....	2	1	1
Administration/supervision .....	18	16	2
Curriculum .....	1	1	0
Marketing .....	1	1	0
Economics .....	1	1	0
Engineering .....	1	1	0
Total .....	356	231	125

Source: Office of Education, Summary Information on EPDA, Awardees, EPDA, pt. F, sec. 552, vocational education leadership development program, 1974-75 participants.

Mrs. MINK. With respect to your part D demonstration funds, I am advised no projects for women were funded under this program in the last fiscal year. Do you have any plans to fund them in the forthcoming fiscal year?

Dr. PIERCE. The Part D program is a general demonstration program. This coming fiscal year we have planned to work with some efforts that have been researched by the National Institute of Education in experience-based vocational education programs. The part D program is not for sex discrimination specifically, but it is a program designed to increase awareness at all levels and to increase preparedness at all levels, so that the program does not really lend itself very well to specific activities for females. I think there are other avenues that we could pursue more profitably than that particular one.

Mrs. MINK. Would you amplify why you feel part D is not suited for special emphasis programs dealing with problems and needs of women students, who comprise 50 percent of the enrollment in our vocational institutions?

Dr. PIERCE. I just was trying to convey, Madam Chairman, my feeling that those projects cut across all of education and really are elementary through the 12th grade kinds of projects. By virtue of that we ought to be concerned about awareness of all young people at elementary levels, both boys and girls, in terms of the opportunities available to them.

Rather than specify that the project has to be only for women, it seems to me a more appropriate action for us to take would be to specify that we want special emphasis to be placed in those projects on elimination of sexual stereotyping. That we can do and I think it is very appropriate.

Mrs. MINK. My question is, has it been done with this distribution of funds under part D?

Dr. PIERCE. No.

Mrs. MINK. Do you intend to do it?

Dr. PIERCE. We will do it in 1976, but not in 1975. The 1975 guidelines have already gone out and projects have been selected for funding.

Mrs. MINK. So we have to wait until the school year beginning 1976?

Dr. PIERCE. For that kind of emphasis, yes. But there are only seven States that were eligible for part D funds in 1975. There will be 42 States eligible for part D funds in 1976, so on the magnitude of emphasis, certainly 1976 will be a more appropriate year than 1975.

Mrs. MINK. Isn't it possible in reviewing applications for grants under this part, to direct the staff to pay special attention to the possibility of selecting out projects which address themselves to this overall subject?

Dr. PIERCE. Only insofar as the rules and regulations stipulate will that be a selection criteria. Madam Chairperson. We have to be very cautious that after the rules and regulations are published in the Federal Register, which indicate what the selection criteria will be, that we don't arbitrarily establish others that people are not really aware of and, therefore, change the rules of the game without applicants knowing what the rules are.

Insofar as we can do it and insofar as there is a statement that directs the applicant's attention to that, we certainly can. But if it becomes a selection criteria and factor that was not published in the Federal Register, then we would be violating the rules.

Mrs. MINK. I would request, Dr. Pierce, that the selection criteria for the part D be forwarded to the committee and without objection that criteria will be inserted in the record.

Dr. PIERCE. For 1975?

Mrs. MINK. That is correct, for 1975.

[Document follows:]

[From Federal Register, Monday, March 31, 1975]

# TITLE 45—PUBLIC WELFARE

## CHAPTER I—OFFICE OF EDUCATION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

### PART 103—RESEARCH AND TRAINING, EXEMPLARY AND CURRICULUM DEVELOPMENT PROGRAMS IN VOCATIONAL EDUCATION

#### EXEMPLARY PROJECTS IN VOCATIONAL EDUCATION ADDITIONAL CRITERIA FOR SELECTION OF APPLICANTS FOR FISCAL YEAR 1975

On January 2, 1975, there was published in the FEDERAL REGISTER at 40 FR 8, a notice of proposed rule making which set forth additional criteria for applications for grants under Part D of the Vocational Education Act of 1963, as amended, 20 U.S.C. 1302(c).

Interested persons were given until February 3, 1975 to submit comments, suggestions, or objections to the proposed criteria. One comment was received which reads as follows:

... recommends that the criteria under which awards are made for Exemplary Projects in Vocational Education be amended to include "Its promotion of male and female participation in occupation (vocational) areas and programs which have tended to attract single sex enrollment." The thrust of this criteria would be to remove sex stereotyping and sex discrimination.

While the suggestion is timely and of a great deal of concern to the U.S. Office of Education, it is felt that the suggestion could be developed more appropriately as a program component under future Exemplary Projects in Vocational Education than as an added selection criteria for Fiscal Year 1975. Consequently, the U.S. Office of Education has determined that a focus on the elimination of sex stereotyping in occupational areas will be taken under advisement as a program component in Fiscal Year 1976 under Part D of the Vocational Education Act of 1963, as amended, 20 U.S.C. 1302(c).

The criteria therefore, are issued as originally published without change, as set forth below.

*Effective date.* Since the criteria are to be issued as originally published in the FEDERAL REGISTER under notice of proposed rule making without change, the criteria shall be effective March 31, 1975.

(Catalog of Federal Domestic Assistance No. 13.502; Vocational Exemplary Projects)

Dated: February 25, 1975.

T. H. BELL,  
U.S. Commissioner of Education.

Approved: March 25, 1975.

CASPER W. WEINBERGER,  
Secretary of Health, Education, and Welfare.

Appendix A of Part 103 is revised as follows:

#### APPENDIX A

#### EXEMPLARY PROJECTS IN VOCATIONAL EDUCATION—ADDITIONAL CRITERIA FOR FISCAL YEAR 1975

*A. Priority of Awards.* In the granting of awards from funds available for the program in addition to consideration of the criteria in 45 CFR 103.25 and 45 CFR 100a.26), the Commissioner has authority to give priority to applications which rank high on the basis of such criteria and which propose projects that involve, in one operational setting at the senior high school level, all of the following features:

1. A strong emphasis on guidance, counseling, placement, and continuing follow-up services.

2. A coordinated demonstration of the cluster concept for occupational preparation, utilizing at least five different occupational cluster programs which have been developed through previous local, State, and/or Federal research and development efforts. (The selected cluster programs should range from those dealing with public service and human service occupations through those dealing with manufacturing and construction occupations. The selected cluster programs should be implemented and demonstrated in such a way to include a high level of involvement of educational, business, industrial, labor and professional organizations and institutions both in the classroom and in the provision of work experience and/or cooperative education opportunities.)

3. Articulation with occupational awareness and exploration programs in feeder schools at the elementary and junior high school levels and with occupational preparation programs at both the secondary and the post-secondary levels.

In addition to the three program requirements stated above, applicants may choose to include strategies designed to familiarize secondary school students with the broad range of occupations for which special skills are required and the requisites for careers in such occupations.

(20 U.S.C. 1301, 1302(c), 1303)

B. *Financial Sources for Projects.* Since comprehensive exemplary projects will require substantial financial resources, consideration should be given in the project design to the possible coordination with relevant programs supported from other sources.

(20 U.S.C. 1301, 1303(a))

C. *Application Review Criteria.* Criteria will be utilized by the Federal and non-Federal reviewers in reviewing formally transmitted applications in fiscal year 1975. These criteria are consistent with 45 CFR 100a.26 and 103.25. Segments or a segment of the application must address each criterion area. Each criterion area is weighted and includes the maximum score that can be given to a segment of an application in relation to the criteria. The criteria and maximum weights for each criterion area are as follows:

Maximum  
score

Criteria

28 (1) *Program or Project Purpose*—The application will be evaluated on the extent to which it relates the proposed program or project to the following broad purposes of the Part D portion of the Vocational Education Amendments of 1968, P.L. 90-576.

(a) The project program or project's potential for reducing the level of youth unemployment.

(b) Its potential contribution to creating bridges between school and earning a living for young people, to promoting cooperation between public education and manpower agencies, and to broadening occupational aspirations and opportunities for young people.

(c) Its emphasis on services for youths who have academic, socio-economic, or other handicaps.

(d) Its relevance to priority areas in vocational education as reflected in the Vocational Education Amendments of 1968, P.L. 90-576, and

(e) Its utilization of new approaches or tested innovations which have emerged from recent research.

(20 U.S.C. 1301, 1302(c), 1303)

72 (2) *Priority Area*—The application will be evaluated on the extent to which it provides for the following three components:

(a) *Guidance Services*—including testing, counseling, placement and continuing follow-up services as these relate to the occupational development, preparation, and placement needs of the young people to be served.

(b) *Occupational preparation* through coordinated cluster programs—The proposed program or project should utilize at least five different occupational cluster programs that have been developed through previous local, State, and/or Federal research and development efforts. (The cluster programs selected should

range from those dealing with public service and human service occupations through those dealing with manufacturing and construction occupations. The selected cluster programs should also be implemented and demonstrated in such a way as to include a high level of involvement of educational, business, industrial, labor, and professional organizations and institutions both in the classroom and in the provision of work experience and/or cooperative education opportunities.)

- (c) **Articulation**—The application should provide for articulation of the cluster programs with existing or ongoing occupational awareness and exploration programs, in feeder schools at the elementary and junior high school levels, which have already permitted the young person to reach a tentative occupational choice. In addition, articulation should be provided with existing secondary and post-secondary occupational preparation programs so that the unnecessary duplication of preparation activities is avoided and the progress of a young person, through a preparation sequence leading to job placement and/or further education, is facilitated.

When the application includes strategies designed to familiarize secondary school students with occupations and the special skills required for them, it will be evaluated:

- (a) On the extent to which a comprehensive array of occupations is included.
- (b) On the extent to which the coverage of training options includes those options at the secondary, post-secondary, and higher education levels in both the public and private sectors, and
- (c) On the extent to which a broad range of educational, business, industrial, labor, and professional people are involved in the development and delivery of such information to young people.

(20 U.S.C. 1301, 1302(c), 1303)

- 32 (3) **Need**—The application should describe how the need for the project was determined, such as what types of surveys and analyses were performed and what interactions took place with students, parents, community, business, industrial, labor, and professional groups:

(20 U.S.C. 1301, 1302(c), 1303)

- 28 (4) **Plan of Operation**—The application will be evaluated on the extent to which it provides a clear description of the strategies which will be used to meet the identified needs, including:

- (a) A clear description of realistically attainable, measurable objectives.
- (b) Procedures for achieving the identified objectives which are appropriate, technically sound, detailed, and which appear practical for wide use in vocational education.
- (c) A plan for a third-party evaluation which will measure the overall effectiveness of the program or project and will determine the extent to which each of the individual objectives is achieved, and
- (d) An adequate management plan, including a PERT chart or some other chart showing critical completion dates, man hours by project staff, and the other resources to be devoted to each of the project objectives.

(20 U.S.C. 1301, 1302(c), 1303)

- 12 (5) **Results**—The application will be evaluated on the extent to which it:

- (a) Identifies proposed results or end products anticipated, and how they will be disseminated.
- (b) Specifies the procedures that will be used for making materials, techniques, and other outputs resulting from the project available to all those concerned with the improvement of vocational and technical education, and

- (c) Lists specific steps that will be taken by the applicant organization to ensure that successful aspects of the program or project will be incorporated into vocational education programs supported with other funds.

(20 U.S.C. 1301, 1302(c), 1303)

- 16 (6) *Personnel*—The application will be evaluated on the extent to which the qualifications and experience of the personnel are appropriate for the proposed project.

(20 U.S.C. 1301, 1302(c), 1303)

- 08 (7) *Facilities and Equipment*—The application will be evaluated on the extent to which the applicant organization has committed itself to the provision of adequate facilities and equipment necessary for the success of the project.

(20 U.S.C. 1301, 1302(c), 1303)

- 12 (8) *Cost effectiveness*—The application will be evaluated on the extent to which:

- (a) The estimated cost appears reasonable in the light of anticipated results.
- (b) The applicant organization has secured documented assurance of support from other cooperating agencies or institutions when this appears necessary to the success of the project, and
- (c) The proposed program or project is of sufficient scope to make a significant contribution to the improvement of vocational education.

(20 U.S.C. 1301, 1302(c), 1303)

- (9) In addition to the above selection criteria, no project may be funded under Section 142(c), Part D, of P.L. 90-576 unless the following conditions are met:

- (a) The application includes suitable procedures to assure that Federal funds made available for the project will not be commingled with State or local funds.

(20 U.S.C. 1303(b)(1)(C))

- (b) Provisions are made for the genuine and meaningful participation of students enrolled in nonprofit private schools in the area to be served, when their educational needs are of the type the project is designed to meet.
- (c) The application includes realistic procedures for coordinating the activities of the proposed project with other programs and projects having the same or similar purposes and with the State Plan for Vocational Education.
- (d) If the application is being submitted by any type of applicant organization other than a State Board for Vocational Education or a local education agency, a convincing case is made that the project would represent an especially significant contribution to achieving the objectives of Part D of the Vocational Education Amendments of 1968, P.L. 90-576.

(20 U.S.C. 1301, 1302(c), 1303).

- (e) Copies of the application have been submitted to the appropriate State Board of Vocational Education for its review. (The Commissioner will not approve any application for a proposed program or project if the State board has notified the Commissioner of its disapproval of such program or project within 60 days of its submission to the State board by the applicant.)

(20 U.S.C. 1303(b)(3))

[FR Doc. 75-8274 Filed 3-28-75; 8:45 am]

Mrs. MINK. Mr. Jeffords, any questions?

Mr. JEFFORDS. Yes. On the top of page 6 you indicate that only 15.3 percent of the state council members are women. I wonder if you could tell me as to what State councils, if any, have approximately an even balance between men and women. Are there any you know of?

Dr. PIERCE. I am not sure there are any. Well, I don't have the data with me, but can provide it for the record. I wish you had asked me about State boards of education. I happen to know that one.

Mr. JEFFORDS. Then I will ask you about that one.

Dr. PIERCE. There is one State board of education which happens to be the State I come from, that has an equal balance, and I think it is the only State board that has an equal balance of female and male members, and that is Michigan. There are four male and four female members of the State board of education.

Mr. JEFFORDS. Well then, let me pursue that good State. Have you seen any difference in the emphasis being placed in that State in trying to eliminate sex discrimination because of the balance on the Board?

Dr. PIERCE. There is one in my personal experience, because I had the responsibility of going before that board and making certain kinds of recommendations, not only for staff for the Department of Education, but for programs, and there was certainly more awareness and sensitivity. I think if I am more sensitive than some, it is because I lived through that kind of experience and was made more sensitive by the members of that State board which continually made me aware of this problem.

I think my own personal experience and opinion is that the problem of awareness is one that is very great and that we really need to look for a whole host of strategies to make people sensitized to the problem, because I don't think that most people purposely make decisions consciously or unconsciously to discriminate against women. They are just not aware of it.

Once you become sensitized to it, you begin to see it and hear it and begin to hear the kinds of things that people say and suddenly you are aware it is a sexist statement and you heard it all of your life, but were not aware of it. I think that is the kind of thing we have to deal with and so do all people in all segments of education.

Mr. JEFFORDS. With respect to that also, I wonder if it is possible for you to determine the States that perhaps do have an even balance on their State councils and whether or not this seems to have indicated statistically any difference in participation in the various vocational education programs.

Dr. PIERCE. That is very difficult to do principally because data by sex was not collected earlier. We could probably make some very gross kinds of comparisons between those States and the survey data, but even the survey data are inadequate, because it is survey data and that does not cover the universe.

I would be reluctant to say that we could give you very much in that last regard simply because we don't have data.

Mr. JEFFORDS. The reason I asked is because it has been suggested at least by one person who appeared before us that we ought to mandate an equal representation on the State councils between male and female. I wonder if you can comment on that particular proposal.

Dr. PIERCE. I have problems with mandating membership. I think that is principally because one of the things we tried to do in our whole legislative thrust is to remove as many Federal mandates as possible and rest more of the decisions with State and local officials and to mandate that is, in a sense, in consistent with the whole thrust of the legislation.

But perhaps it is coming to that and perhaps we have to get to that point. I am ambivalent, I guess, and I really would not have any particular objection except that I think you have to look very carefully at the current requirements and the current things.

As I recall, there are 21 members mandated in the State advisory councils by occupational area, by experience and background, and simply by virtue of the fact that many women have been excluded from many of those areas and those occupations, it might be very difficult to meet both requirements. You might have to take a very hard look at those other requirements if you are going to mandate a 50-50 split at this time.

That is my principle concern, that you put the States in a position where they simply could not respond.

Mr. JEFFORDS. I note in your testimony you sent several memos to state personnel, urging them to eliminate sex discrimination. I wondered what directives or other actions you have taken with respect to your own staff to have them report back on what they observed regarding sex discrimination and the Office of Education, vocational education program.

Dr. PIERCE. I have given a standing order to all of my people to keep me informed and to keep also their immediate supervisors informed of any problems in this area. For example, we were in a conference in Texas recently where we were looking at displays of materials developed under part D projects, which the chairperson had spoken about before, and those were materials that had been developed not as a part of the grant, not directly as a part of the grant, but as spinoffs as a part of the grant. They were developing programs and they developed some curricular materials of their own.

Some of us looked at those materials because they were in a sense career, or supposed to be career educational materials, and became concerned that they were really sexually biased. Many of them perpetuated the sex role stereotyping, showing women only in traditional women's occupations.

By virtue of that we are now looking at ways in which we can eliminate that and prevent that from happening in projects that we have any involvement in. We keep getting constant feedback like that and we then try to take action.

Mr. JEFFORDS. Do you centralize this information or collect it in any formal way so it is available for viewing or reviewing?

Dr. PIERCE. Which information?

Mr. JEFFORDS. The information about the incidents of discrimination to which you referred.

Dr. PIERCE. No, not in a formal way. No sir, we have never done that.

Mr. JEFFORDS. On page 4 you spoke of producing a series of manuals describing career planning for adults and focusing on ethnic minorities and women. What is your plan for disseminating these manuals?

Dr. PIERCE. That project has not yet been tested or even been completed. Until such time as we get the completed product and can look at the quality of the product, we don't have any particular plans for dissemination. We would wait until we could evaluate and get third-party evaluation.

Then if it is a good project, there is always a dissemination part built into the project. In other words, they must provide x number of copies to whomever we believe it is appropriate. But if those manuals do what we hope they will do, well, then disseminate them to all State and local vocational education officials insofar as funds allow.

It may mean, therefore, we can only make them available to the ERIC system and only available to our own supported vocational education system and perhaps provide State departments of education with copies and as we have done with some projects in the past provide them with camera-ready copies, but make them responsible for providing copies of those materials to the 17,000 school districts around the country.

We don't have resources to do that.

Mr. JEFFORDS. I am concerned, as I am sure you are, of course, with eliminating sex discrimination in our vocational education system. Of course, that is only going to be useful if we can only do something in getting employers and unions to hire women on jobs not traditionally held by women.

I know the Vocational Education Act calls for coordination of efforts in the schools and industry and unions on this question.

I wonder what plans there are for trying to accomplish the goal of this kind of coordination. Are there workshops or anything else planned to try to help in this area?

Dr. PIERCE. The principal plan we have right now is that, as I said, on the 12th and 13th of May we will be meeting with the State directors of vocational education. They are the key to what happens at the State and local level. The purpose of that is to develop with them a set of strategies of specific approaches that we can take at the national level and that they can take at the State and local levels, to address themselves to all of these problems, the problem of those schools that, as Mr. Holmes reported, are single-sexed, to address themselves to the problems of those courses which, for one reason or another, do not entice females or have been closed to them.

Then we have the problem of barriers that exist at the State and local levels, and in some cases at the Federal level, and the need to develop a whole host of approaches that we can take to address ourselves to that problem. After the 13th I will have a better response for you than I do now, because I need to work these things out with

those people, because, as Mr. Holmes said, the Federal Government simply cannot do it alone.

There are too many activities, too many barriers, too many attitudes at the local and State levels that have to be addressed and we have to have their active support.

Mr. JEFFORDS. Can you tell me from your experience so far, how receptive the employers and unions have been to this type of discussion?

Dr. PIERCE. Yes, it is mixed pattern. Many of them are receptive and you find many of the State officials, I think, have enlightened attitudes and sometimes when you get to the local level they are not quite as receptive.

They are worrying today about high rates of unemployment and they are concerned about those people who are not now on anybody's rolls and, therefore, anything that appears to them to be detrimental to getting those people back in the labor market is of concern to them.

So I just have to say it is a mixed response, but in general I have been pleased. For example, we have worked with labor unions for some time now to get something called housebuilding programs or construction or home construction programs going in a lot of areas around the country, because the building trades at first were concerned about that particular project because they were teaching young people to wire houses and to build the houses and to become carpenters and plumbers.

They were actually building a house and then selling it on the open market. It was viewed as being direct competition. But we worked those things out in most places with the labor unions and they are now very supportive of those programs, because they see them as providing trained labor for their labor pool.

Interestingly enough, there have been small numbers of females in that particular program. I had some data before me I had planned to read over the weekend, that a friend of mine from Michigan sent me, some enrollment figures of all programs in that particular area center and there is one woman in the house construction program.

Now there are 45 men in that program. Obviously that is out of balance. But there are some glimmers of hope and some breakthroughs in some areas.

Mr. JEFFORDS. That is all I have.

Mrs. MINK. Thank you.

Mr. Blouin.

Mr. BLATTIN. I have one area of questioning to go into, but if you have gotten into it in your previous comments and I was not here, just say so and I will read the record tomorrow. Are you doing anything in the early grade level, say K through 5 or 6, in terms of the stereotypes that exist in readers and things of this nature, to catch the problem before it develops—to eliminate this mental tracking that develops—in the beginning?

Dr. PIERCE. Yes, sir, we are. I have a standing order to my staff that any program that we are involved in that deals with curriculum development, we must eliminate or must be sure there is no sexual stereotype or perpetuation of sexual stereotyping in the development of those materials. In addition, NIE has been active in developing

counseling materials and awareness materials, materials that they can show to counselors, which show how this invidious stereotyping takes place in new materials in all kinds of ways. Therefore, NIE has been working on this problem.

We have funded a project and I mention it in testimony, "The Kingdom of Could Be You," which is a filmstrip originally shown in cooperation with "Captain Kangaroo" for preschoolers, kindergarten and first graders. It is a series of 5- to 6-minute filmstrips showing a wizard with children going around on a flying carpet looking at occupational areas.

I am just delighted with that because, as you look at the message that comes across to young children, you see girls as deep sea divers and you see boys as nurses and you see all races represented and all of the traditional stereotypes, I think, have been removed, so we are doing much of that.

Mr. BLOUX. Do you see any kind of a marked change in the types of books that are being used in the early grades? Are the school districts getting away from the John and Jane stereotype kinds of primer readers they have been using for so many years?

Dr. PIERCE. I think so, but I am not a very good witness for that question. I deal more with vocational education and not with the general overall education area. I know, by virtue of a lot of experiences, that not only are publishers very aware of this, but a lot of local groups are bringing a lot of pressure to bear on publishers.

I think that the textbook field has probably made a quantum leap in the last 4 or 5 years in trying to address themselves to that area and whether they have gone far enough, I can't tell.

Mr. BLOUX. The reason I bring it up is it strikes me as a necessary change to change that basic exposure in the beginning if we are going to get away from the catchup kind of circle, we find ourselves stuck in, if we don't start turning the corner initially. We will always be in a corrective vocational kind of circle and that is an endless mess.

Dr. PIERCE. That is correct.

Mr. BLOUX. I appreciate that.

Mrs. MINK. I do have one or two final items I wanted to cover before calling the next witness. They have to do with the suggestions made by several individuals that perhaps the setting aside of separate Federal funds for consumer and homemaking have contributed to the isolation and extending of discriminatory practices against women students in vocational education.

Would you care to comment about that point?

Dr. PIERCE. We have, in our proposed legislation, Madam Chairperson, dealt with that issue by eliminating that setaside and by including homemaking in the definition of vocational education and recognizing that homemaking is an occupation, that people do indeed go into the home and that is one of the occupations that women and men should pursue. We try to include it as a part of vocational education rather than keep it separate.

The issue of whether the general education components of home economics and consumer education ought to be retained is one that we have handled in that way. I don't think anybody can argue that with more women working, more men in the home, more people not

counseling materials and awareness materials, materials that they can show to counselors, which show how this invidious stereotyping takes place in new materials in all kinds of ways. Therefore, NIE has been working on this problem.

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The issue of whether the general education components of home economics and consumer education ought to be retained is one that we have handled in that way. I don't think anybody can argue that with more women working, more men in the home, more people not

having a mate, to come home to that takes care of their home and activities of their home, that all people have to know better how to manage their home and manage their life and to balance their work and homelife. We have not addressed ourselves to whether that thrust ought to be retained and have simply folded the home economics into the definition of vocational education.

Therefore, with the way we have structured the act, if the States and territories want to continue those home economics programs, they may do so. They do not have to do so, however, because there is no requirement that they spend a certain amount of dollars for that particular activity as there was in the past.

Mrs. MINK. One final question that has to do with the films and filmstrips and other audiovisual materials which you mention in your testimony and in response to Mr. Blouin's questions. May I inquire whether these films and other visual materials are available and could be provided to the committee so that we might have an opportunity to see what the Office of Education is producing, bearing in mind the near catastrophe several years ago with the career education film that portrayed women in 9 instances out of 10 sitting behind a typewriter?

Dr. PIERCE. Yes, ma'am, you may certainly have any films that we have. The "Peanuts" materials that I referred to are not yet available, but "The Kingdom of Could Be You" films are available and those strips being available, we will be happy to provide them.

Mrs. MINK. Mr. Buchanan.

Mr. BUCHANAN. Thank you, Madam Chairperson. I have no questions.

Mrs. MINK. Thank you very much, Dr. Pierce. We appreciate your testimony and cooperation.

Our final witness this morning is Corinne Rieder, Assistant Director, Career Education Program, National Institute of Education, HEW, and we welcome you to the hearing and apologize for the lateness of the hour, but we will hear you until we must leave.

**STATEMENT BY CORINNE RIEDER, ASSISTANT DIRECTOR, CAREER EDUCATION PROGRAM, NATIONAL INSTITUTE OF EDUCATION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

Dr. RIEDER. Thank you, Madam Chairperson.

I am pleased to appear before this distinguished subcommittee today and participate in its hearings on sex stereotyping in vocational education. As the National Institute of Education is the educational research arm of the Department, my testimony will be confined to a description of our research and development activities in this area.

NIE is presently engaged in several activities concerning occupational sex role stereotyping in career decisionmaking. These projects are useful to, and have implications for, vocational educators in eliminating sexual stereotyping in their counseling activities.

In 1974, the NIE education and work task force completed a study on "Sex Bias and Sex Fairness in Career Interest Inventories." Career interest inventories are instruments that are used as guidance tools to help persons assess interests in various occupational areas.

During that study, NIE held a 3-day workshop inviting representatives from education and women's associations, Government officials, congressional staff, test publishers and constructors, counselors and psychologists to assist NIE in constructing guidelines to assess the sex fairness or sex bias of these career-interest inventories. The guidelines were published by NIE last July. To date, NIE has received over 5,000 requests for these guidelines from colleges, churches, public schools, technical institutions, vocational services, the military, private businesses, and State agencies. With your permission, Madam Chairperson, I would like to submit a copy of these guidelines for the record.

Mrs. MINK. Without objection, they will be received for the record. [Information follows:]

#### GUIDELINES FOR ASSESSMENT OF SEX BIAS AND SEX FAIRNESS IN CAREER INTEREST INVENTORIES

The attached guidelines have been developed as part of the National Institute of Education (NIE) Career Education Program's study of sex bias and sex fairness in career interest inventories. They were developed by the NIE Career Education Staff and a senior consultant and nine-member planning group of experts in the fields of measurement and guidance, appointed by NIE. The draft guidelines were discussed in a broadly representative three-day workshop sponsored by NIE in Washington, D.C. in March 1974. Through successive revised drafts, culminating in this edition of guidelines, the diverse concerns of inventory users, respondents, authors, and publishers were taken into consideration and resolved as far as possible.

During the development of the guidelines, the following working definition of sex bias was used:

Within the context of career guidance, sex bias is defined as any factor that might influence a person to limit—or might cause others to limit—his or her considerations of a career solely on the basis of gender.<sup>1</sup>

The working definition expresses the primary concern that career alternatives not be limited by bias or stereotyped sex roles in the world of work.<sup>2</sup> The guidelines represent a more specific definition than previously available of the many aspects of sex fairness in interest inventories and related interpretive, technical, and promotional materials. The issues identified in the course of guideline development are dealt with in commissioned papers to be published by the U.S. Government Printing Office as a book, *Issues of Sex Bias and Sex Fairness in Career Interest Measurement*, available from the Career Education Program, National Institute of Education, Washington, D.C. 20208 in October 1974.

The term "career interest inventory," as used in these guidelines, refers to various formal procedures for assessing educational and vocational interests.

<sup>1</sup> For a comprehensive analysis of the many forms in which sex bias appears in written materials the reader is referred to the guidelines of Scott Foreman and Company (1972).

<sup>2</sup> An alternative interpretation of sex bias has been suggested by Dr. Dale Prediger and Dr. Gary Hanson. It defines sex restrictiveness in interest inventories reporting procedures and indicates under what conditions sex restrictiveness is evidence of sex bias. In sum, more it can be stated as follows:

An interest inventory is sex restrictive to the degree that the distribution of career options suggested to males and females as a result of the application of scoring or interpretation procedures used or advocated by the publisher is not equivalent for the two sexes. Conversely, an interest inventory is not sex restrictive if a career option covered by the inventory is suggested to similar proportions of males and females. A sex restrictive inventory can be considered to be sex-biased unless the publisher demonstrates that sex restrictiveness is a necessary concomitant of validity.

Still another interpretation has been suggested by Dr. John L. Holland.

An inventory is unbiased when its experimental effects on female and male respondents are similar and of about the same magnitude—that is, when a person acquires more vocational options becomes more certain, or learns more about himself (herself) and the world of work. The principles can be extended to any area of bias by asking what differences proposed revisions of inventories, books, teacher and counselor training would make.

A fuller explanation of both of these interpretations will appear in *Issues of Sex Bias and Sex Fairness in Career Interest Measurement*, U.S. Government Printing Office, 1974, in press.

The term includes but is not limited to nationally published inventories. The interest assessment procedures may have been developed for a variety of purposes and for use in a variety of settings. The settings include educational and employment-related settings, among others, and the uses include career counseling, career exploration, and employee selection (although the latter may also involve other issues of sex bias in addition to those discussed here).

The guidelines do not represent legal requirements—They are intended as standards a) to which we believe developers and publishers should adhere in their inventories and in the technical and interpretive materials that the American Psychological Association (APA) *Standards for Educational and Psychological Tests* (1974) requires them to produce, and b) by which users should evaluate the sex fairness of available inventories. There are many essential guidelines for interest inventories in addition to those relating to sex fairness. The guidelines presented here do not replace concerns for fairness with regard to various ethnic or socioeconomic subgroups. The guidelines are not a substitute for statutes or federal regulations such as the Equal Employment Opportunity Commission (EEOC) selection guidelines (1970) and Title IX of the Education Amendments of 1972 (1972) or for other technical requirements for tests and inventories such as those found in the APA standards. The guidelines thus represent standards with respect to sex fairness, which supplement these other standards.

The guidelines address interest inventories and related services and materials. However, sex bias can enter the career exploration or decision process in many ways other than through interest inventory materials. Several of the guidelines have clear implications for other materials and processes related to career counseling, career exploration, and career decision-making. The spirit of the guidelines should be applied to all parts of these processes.

The guidelines are presented here in three sections. I. The Inventory Itself; II. Technical Information, III. Interpretive Information

#### I. THE INVENTORY ITSELF

A. The same interest inventory form should be used for both males and females unless it is shown empirically that separate forms are more effective in minimizing sex bias.

B. Scores on all occupations and interest areas covered by the inventory should be given for both males and females, with the sex composition of norms—i.e., whether male, female, or combined sex norms—for each scale clearly indicated.

C. Insofar as possible, item pools should reflect experiences and activities equally familiar to both females and males. In instances where this is not currently possible, a minimum requirement is that the number of items generally favored by each sex be balanced. Further, it is desirable that the balance of items favored by each sex be achieved within individual scales, within the limitations imposed by validity considerations.

D. Occupational titles used in the inventory should be presented in gender-neutral terms (e.g., letter carrier instead of mailman), or both male and female titles should be presented (e.g., actor/actress).

E. Use of the generic "he" or "she" should be eliminated throughout the inventory.

#### II. TECHNICAL INFORMATION

A. Technical materials provided by the publisher should describe how and to what extent these guidelines have been met in the inventory and supporting materials.

B. Technical information should provide the rationale for either separate scales by sex or combined-sex scales (e.g., critical differences in male/female response rates that affect the validity of the scales vs. similarity of response rates that justify combining data from males and females into a single scale).

C. Even if it is empirically demonstrated that separate inventory forms are more effective in minimizing sex bias, thus justifying their use, the same vocational areas should be indicated for each sex.

D. Sex composition of the criterion and norm groups should be included in descriptions of these groups. Furthermore, reporting of scores for one sex on scales normed or constructed on the basis of data from the other sex should be supported by evidence of validity—if not for each scale, then by a pattern of evidence of validity established for males and females scored on pairs of similar scales (male-normed and female-normed, for the same occupation).

E. Criterion groups, norms, and other relevant data (e.g., validity, reliability, item response rates) should be examined at least every five years to determine the need for updating. New data may be required as occupations change or as sex and other characteristics of persons entering occupations change. Text manuals should clearly label the date of data collection for criterion or norm groups for each occupation.

F. Technical materials should include information about how suggested or implied career options (e.g., options suggested by the highest scores on the inventory) are distributed for samples of typical respondents of each sex.

G. Steps should be taken to investigate the validity of interest inventories for minority groups (differentiated by sex). Publishers should describe comparative studies and should clearly indicate whether differences were found between groups.

### III. INTERPRETIVE INFORMATION

A. The user's manual provided by the publisher should describe how and to what extent these guidelines have been met in the inventory and the supporting materials.

B. Interpretive materials for test users and respondents (manuals, profiles, leaflets, etc.) should explain how to interpret scores resulting from separate or combined male and female norms or criterion groups.

C. Interpretive materials for interest inventory scores should point out that the vocational interests and choices of men and women are influenced by many environmental and cultural factors, including early socialization, traditional sex-role expectations of society, home-versus-career conflict, and the experiences typical of women and men as members of various ethnic and social class groups.

D. Manuals should recommend that the inventory be accompanied by orientation dealing with possible influences of factors in C above on men's and women's scores. Such orientation should encourage respondents to examine stereotypic "sets" toward activities and occupations and should help respondents to see that there is virtually no activity or occupation that is exclusively male or female.

E. Interpretive materials for inventories that use homogeneous scales, such as health and mechanical, should encourage both sexes to look at all career and educational options, not just those traditionally associated with their sex group, within the broad areas in which their highest scores fall.

F. Occupational titles used in the interpretive materials and in the interpretation session should be stated in gender-neutral terms (e.g., letter carrier instead of mailman) or both male and female titles should be presented (e.g., actor/actress).

G. The written discussions in the interpretive materials (as well as all inventory text) should be stated in a way which overcomes the impression presently embedded in the English language that a) people in general are of the male gender, and b) certain social roles are automatically sex-linked.

H. The user's manual a) should state clearly that all jobs are appropriate for qualified persons of either sex, and b) should attempt to dispel myths about women and men in the world of work that are based on sex-role stereotypes. Furthermore, ethnic occupational stereotypes should not be reinforced.

I. The user's manual should address possible user biases in regard to sex roles and to their possible interaction with age, ethnic group, and social class, and should caution against transmitting these biases to the respondent or reinforcing the respondent's own biases.

J. Where differences in validity have been found between dominant and minority groups (differentiated by sex), separate interpretive procedures and materials should be provided that take these differences into account.

K. Interpretive materials for respondent and user should encourage exploratory experiences in areas where interests have not had a chance to develop.

L. Interpretive materials for persons re-entering paid employment or education and persons changing careers or entering post-retirement careers should give special attention to score interpretation in terms of the effects of years of stereotyping and home-career conflict, the norms on which the scores are based, and the options such individuals might explore on the basis of current goals and past experiences and activities.

M. Case studies and examples presented in the interpretive materials should represent men and women equally and should include but not be limited to examples of each in a variety of non-stereotypic roles. Case studies and examples of mature men and women and of men and women in different social class and ethnic groups should also be included where applicable.

Both user's manuals and respondent's materials should make it clear that interest inventory scores provide only one kind of helpful information, and that this information should always be considered together with other relevant information—skills, accomplishments, favored activities, experiences, hobbies, influences, other test scores, and the like—in making any career decision. However, the possible biases of these variables should also be taken into consideration.

## REFERENCES

- American Psychological Association. *Standards for Educational Psychological Tests*. Washington, D.C. American Psychological Association, 1974. Available from the American Psychological Association, 1200 17th St., N.W., Washington, D.C. 20036. \$5.00 for non-members; \$3.00 for members.
- Equal Employment Opportunity Commission. "Guidelines on Employee Selection Procedures." *Federal Register*, Vol. 35, No. 149.
- Diamond, Esther E., Editor. *Issues of Sex Bias and Sex Fairness in Career Interest Measurement*. Washington, D.C.: U.S. Government Printing Office, 1974, in press. To be available from the Career Education Program, National Institute of Education, Washington, D.C. 20208.
- Scott, Foresman and Company. *Guidelines for Improving the Image of Women in Textbooks*. Glenview, Illinois, September, 1972. Available from Scott, Foresman and Company, 1900 East Lake Avenue, Glenview, Illinois 60025.
- Title IX. *Education Amendments of 1972*. Public Law 92-318, June 23, 1972.

Dr. RIEDER. A second product of this NIE study on sex bias and sex fairness in career interest inventories is the development of a learning kit for guidance counselors and teachers to be used in delivering career counseling free of sex bias. The kit, which will be available by mid-May 1975, will show the user how and why occupational sex role stereotyping occurs and will offer a variety of tools and procedures for insuring that users of this kit provide bias free career counseling. The kit will also provide instruction in the use of the NIE guidelines and offers audio tapes, role-playing situations, and simulations as exercises for learning unbiased counseling procedures. The kits will be available through their publisher, Abt Associates in Cambridge, Mass.

An NIE-funded study by the Human Interaction Research Institute in Los Angeles has also been completed this year. It reviews existing research on the participation of women in the labor force, synthesizes and evaluates it to yield information of practical utility to counselors and women making career decisions.

Concrete products of this study are:

A counselor sourcebook summarizing this research, which will also be useful as a reference to researchers and counselor trainees.

A counselee handbook to be used by the client and her family which discusses in clear, understandable language, new laws relevant to women in the work force, child care opportunities, women's studies programs in college and job search skills.

Finally, an annotated bibliography to be used primarily by social science researchers seeking an up-to-date resource for assessing the growing literature on women in the world of work. All three of these products will be available to the general public in 1975. We have advance copies with us today should the committee desire them.

Nearing completion this year is a two-volume compendium of career educational materials which include descriptions of materials used by vocational educators. This compendium will contain a section on sex and race bias which makes an analysis of 100 randomly selected career educational materials, contains a checklist of the kinds

of bias found in such materials, and gives information on how to counteract biased materials that teachers and counselors are already using. Women on Words and Images (WOWI) in Princeton, N.J., has been contracted with to draft the compendium's section on sex bias. This is the organization which published "Dick and Jane as Victims," the critique of sex bias in textbooks. The compendium will be published in May 1975 and will be available to the general public through the publisher, Education Products Information Exchange Institute.

This July, NIE will begin funding the development of a TV career awareness program for young children and their families. The TV program will aid young girls, boys, and minority group members in expanding their awareness of occupational options.

The institute is also concerned with career development for women reentering the labor market. The Educational Development Center in Providence, R.I., is exploring an innovative way to provide career information and counseling to women to facilitate their reentry into the workplace. The center is preparing a series of manuals for home and community-based counseling, also appropriate for adoption in vocational, technical centers. Some specific products are manuals for organizing and arranging a career counseling center for women, including materials for inservice training of counselors.

Another NIE-sponsored Education Development Corp. product is a series of films to be used as the takeoff point for discussion on career choices faced by women. The film "Girls at Twelve," produced by the award winning film-maker Joyce Chopra, is being used in schools throughout the country. Under development is a sequel to it, a special film on career choices and conflicts faced by women reentering the labor market.

In conclusion, Madam Chairperson, I would also like to mention that NIE's women's program is conducting an in-house research project on vicarious achievement patterns of women. These patterns predispose women to accept and define success through the achievement of others to whom they are related or with whom they work rather than through their own efforts. Current vicarious achievement patterns in women are a major factor in the isolation of women within a narrow band of occupational roles. NIE recognizes that vicarious achievement patterns are a serious barrier to women's achievements and therefore is developing an instrument to help to identify individuals who exhibit this syndrome.

In addition, NIE plans to develop training modules to help individuals to overcome this problem. These modules will be designed for use by students, teachers, guidance counselors, education administrators, staffs, and parents. NIE expects this program to give much insight into and help in alleviating the internal barriers women face in attaining success in all aspects of their life.

All of NIE's research projects will, of course, be available to the entire Education Division as well as the general public. The Division expects that this research together with the programmatic efforts of the Office of Education, will significantly advance our ability to deal with the problems of sex stereotyping in vocational education. I will be happy to answer any questions on the research I have discussed.

Thank you again for the opportunity to be here today.

Mrs. MINK. Thank you very much, Dr. Rieder, for your overview on the activities of NIE. While the matters that you describe are very impressive, could you tell the committee what percentage of the NIE funds went into the research that you have just described?

Dr. RIEDER. During fiscal years 1973, 1974, and 1975 and proposed 1976, we spent, or are planning to spend a total of \$5 million. That is out of a total budget of \$300,031,000 for the Institute over that period. That is about 1.5 percent of our resources. That includes about 38 projects over that 4-year period.

Mrs. MINK. What can this committee do to encourage the NIE to do more to help? A good many of the matters that you discussed are basic to the problems of women, the discrimination that they face in occupations, the individual stereotyping that begins literally from infancy, which finally culminates in the lack of open career opportunities and all of the rest that we have heard described over the last few days. In certainty, the NIE ought to be doing more.

What can this committee do to make society more sensitive to the urgency of this problem and to the deprivation that 50 percent of our children and adults suffer because of the very kinds of things you discussed. The one that impressed me the most was your brief description of the vicarious achievement concept. This is one of the difficulties that we must try to understand and cope with and develop curriculum systems that can somehow offer themselves as a balance to this attitude which young people grow up with so soon.

What can we do?

Dr. RIEDER. Two things, first we certainly hope when we come before you with our fiscal 1976 budget that we get the funding that we ask. I think we have not been able to do more, because, you are well aware, the Institute has had funding problems in the past. I think one of the reasons we have not done more is that we inherited many projects from OE and had little money not already committed. Second, as you write appropriations report language, you could indicate your concern.

Mrs. MINK. Thank you for your observation. Mr. Buchanan?

Mr. BUCHANAN. Thank you, Madam Chairperson.

I will have to begin by echoing the chairperson's concern about such a limited amount of the total budget going for this purpose. We are dealing with a group which comprises a majority not a minority group, we are dealing with a group that all of the records would indicate falls victim to various inequities, both in preparation for the many careers for which women do qualify and can qualify and which would be virtually, most of them, not available, as indicated by employment statistics. So it seems to me, as the chairperson says you have to begin with the preschool time to get at this problem. It should be an area of great emphasis for NIE and perhaps we need to so instruct you, I don't know.

I note that you do have incorporated in your projected plans, planning development for a TV career awareness program for your children and their families. You say it will aid them and extend their awareness of occupational options.

It seems to me this is a level at which you must begin. I don't know if you can tell us more about what you propose to do at this point.

Dr. RIEDER. I think if you look at the research, early socialization, a critical problem—self-imposed aspirations—the motivations that women have—one so important that that is why we focused on that area. We feel through the use of television, with limited resources that we can hit a wider range of people. We will be going out with a request for proposals or qualifications.

Mrs. MINK. Will you yield?

What are we going to do about the television commercial?

Dr. RIEDER. That is a good question. And one which we hope to explore.

Mrs. MINK. Thank you.

Mr. BUCHANAN. You mentioned another important thing that I note with interest that you are planning to do. You say you have under development a sequel, a special film on career choices and conflicts faced by women entering the labor market.

It is another area of great need, it seems to me, and I suppose that is still in the planning stages and you cannot tell us more about it?

Dr. RIEDER. That film has been funded and will be completed this year.

Mr. BUCHANAN. Very good. Now, you mentioned the guidelines which were published by NIE last July and the various groups which helped to frame them and that you had received many requests, over 5,000 from various institutions. Can you tell us anything about the content of these guidelines?

Dr. RIEDER. It is interesting when you look at career interest inventories, you find blatant sex discrimination. For example, there used to be, pink and blue forms. If you can believe it. In other instances, if you and I took an interest inventory and scored the same and let's say, it was architecture and accounting, two common occupations, that would not even be part of the women's form, so I couldn't even be directed into that field even though you and I had the same scores.

What we try to do through the guidelines and also through the dialogas is to help guidance counselors understand the "norms," to which a student's scores are compared, what a student responses mean and what kinds of information they should give to students. These are some of the perhaps most obvious barriers we are trying to overcome and what these guidelines point out.

There are some 20 to 30 guidelines we have prepared.

Mr. BUCHANAN. I don't know if it is or would be worthwhile for us to have these for the record since these are published, but I must say what you have done seems good. It would appear to me that perhaps the committee needs to try to devise language that will require emphasis in this area. You know, I remember "The Boy With Green Hair." I would hate to eliminate sexual distinction because it would be a bad thing for the world, not all sexual distinctions, but it would seem to me that if you were to state the point that more than half of the persons who require employment and must fulfill responsibilities that entail employment, more than half of the persons in society that have a productive role to play are systematically treated differently in education, especially in vocational education and systematically excluded in many areas of employment still not in an equitable position, it does sound pretty bad. I don't know, do you think that is a challengeable statement?

Dr. RIEDER. I think it is a terribly important problem and especially since women comprise nearly 40 percent of the labor force. I think we have to move toward opening up more educational opportunities for women.

Mr. BUCHANAN. Well, I certainly hope you will give it all of the emphasis you can under the existing ground rules and we will try to figure out some new ones.

Mrs. MINK. Yes. I would like to request whatever copies are available of the materials that you have prepared under your grant, and other reports which you have mentioned in your testimony, if you will be provided to the committee. We would be most pleased to have them for our files and for examination by the members who might be interested. Some of the materials which you have prepared, as you mentioned in your testimony, I find very interesting.

How would an individual in a local district gain access to these materials? Do you publish a list from which they can place orders? How in this information disseminated to the general community of interested persons?

Dr. RIEDER. Two routes, primarily through commercial publishers. We feel they have an active dissemination system built in and the incentive to go out and sell materials, so we used that as opposed to something like the Government Printing Office. In addition, we will be working with the office of Education to distribute materials, which will disseminate some of our products through State Department's of Education and then through local school systems. Similar to the Office of Education, are one limited in the number of copies we can buy and distribute. We certainly can't buy, for example, enough for every school district in the United States, 17,000 copies.

Mrs. MINK. Do you have a publication list with a short description of materials that can be obtained from the institute upon request?

Dr. RIEDER. Yes.

Mrs. MINK. Anyone writing to the institution can be provided the list of publications and where they can be purchased?

Dr. RIEDER. Yes.

Mrs. MINK. The matter to which I made parenthetic reference with regard to television commercials was not a facetious remark. I think it is a very serious problem and I regard it almost of equal significance as the concerns that parents and others have expressed with regard to the influence of all of the violence that we seen on television and the impact it has on children. I would hope that NIE would be studying the impact of the commercials on young children in particular, especially as they minimize and diminish the world of women in terms of what even children appreciate as the regular, actual reality in their own homes.

I mean, why are women always with the scrub brushes, testing out the marvelous new inventions that we see in the kitchen in the 10-second split and why are the women always standing before the automatic washer testing out which soap can wash faster and why are women always doing the marketing to see which toilet paper is softer, and so on and so forth.

I think the realities of the world are such that this is not the typical average family situation. Certainly, it has not been true in the 20-plus years of my own experience as a homemaker.

So, it seems to me that while this has been mentioned late, it has enormous implication for young children, particularly. We are serious about the matter of influence in early childhood educational experiences and in elementary education and the impacts on motivations of a child. We really must get at the business of opening up vocational opportunities, so that children volunteer for all kinds of different endeavors, rather than being forcefully channeled, as they are now. An open situation in which all fields of occupational endeavors are open, by tradition, by social acceptance, by national attitude, and by Federal legislation, is what I really, really think is important in our whole effort in this direction.

Mr. BUCHANAN. Would you yield?

Mrs. MINK. Yes.

Mr. BUCHANAN. I would simply point out I would concur, that has not been true of my marriage, either. A good part of the time I run everything around my house, the dishwasher, washing machine, lawnmower, et cetera. Well, at least I do some of the time. But the trouble is, my generation never got taught how to do anything by anybody and anything I do is apt to turn out a disaster. This means my wife gets ripped off and I have a frustrating experience when I try to do the things I need to do to help in the necessary homemaking tasks and I use that personal example only to say, I think one of the areas you really need to do research in is how ~~you go about changing concepts~~ so that young men are encouraged to do those things necessary for their survival, if they are bachelors and necessary for their families welfare, if they do marry in learning certain minimal homemaking skills that I think any male adult in the country is apt to need, unless he is an immensely wealthy person or perhaps in jail.

Dr. RIEDER. I can only agree with both of your comments and I think on questions of commercials we will take a look at that.

Mrs. MINK. Thank you very much. We have certainly gained a great deal by your reporting to us the activities of NIE and welcome the receipt of the reports and the materials that you have described in your testimony.

If there are no further questions?

Ms. HAYSE. Madam Chairperson, in the interest of time, we did not bring with us the Secretary's Advisory Council on the Rights and Responsibilities of Women, but they are interested in this area and have chosen the role of women in vocational education as one of their priorities for this year. We will, hopefully report to you later in this year on their accomplishments.

Mrs. MINK. Thank you very much for that further information.

If there are no further questions from members of the committee, the Chair now calls the meeting to an end and the committee is adjourned.

Thank you.

[Whereupon, at 12:15 p.m. the subcommittee adjourned, to reconvene at the call of the chair.]


WOMEN IN VOCATIONAL EDUCATION

Project Baseline Supplemental Report

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## ABSTRACT

women, who comprise 57 percent of the work force, are concentrated in three fields of employment: teaching, health, and office occupations. They earn only 66 percent of the average wages paid to men, despite the fact that they work because of economic need. Women's earnings often determine the family's standard of living and the family's ability to meet its needs. The purpose of this report is to review the current status of women in Vocational Education to determine if there is a cause-effect relationship between school structure and limited job options for women in the world of work.

## FINDINGS

According to a review and analysis of available data, schools at all levels are operating separate Vocational Education programs for women, limiting girls to traditional, female-intensive offerings perpetuates and contributes to restricted job opportunities and lower earnings for women graduates. Although women comprise 55.3 percent of total Vocational Education enrollments and two-thirds of all secondary vocational enrollments, they are concentrated in low-wage-earning home economics and in health and office occupations, fields in which they are most prevalent in the world of work.

Major findings are as follows:

1. Of the 134 U.S. Office of Education institutional titles, women are a majority in only 33 wage-earning course options. Ninety-seven programs have at least 75 percent of one sex or the other.
2. Consumer and homemaking programs, which do not provide job skills, have 25 percent of female enrollment. Occupational home economics, in which two percent of females in Vocational Education are enrolled, leads to low-paying, dead-end jobs.
3. In post-secondary education, women are concentrated either in technical programs of short duration or in health or office occupations.
4. At the college level, 56 percent of all bachelor's degrees granted to women are in Education. Women in education at the bachelor's and master's levels are dispersed widely throughout 46 disciplines except educational administration, physical education, driver and safety education, industrial arts, vocational and vocational-technical, and agricultural education. However, women comprise only 11 percent of total doctorates granted in all disciplines, but only 0.7 percent of doctoral degrees granted in industrial arts, vocational, and vocational-technical education in 1970-71.
5. With women faculty limited to 20 percent of the total in higher education and a paucity of women in school administration, it is apparent that women are not being encouraged to prepare for vocational administration.
6. Female teachers and administrators are more prevalent in the lower grades. The higher the grade level, the fewer the women both in the classrooms and in administration. Women comprise only 0.01 percent of school superintendents, and there are no

- female State directors of Vocational Education.
7. Policy makers in Vocational-Technical Education are overwhelmingly male, with few women elected or appointed to State or National policy and advisory boards.
  8. Textbooks, teaching practices, and extra-curricular activities discriminate against girls.
  9. Counselors are doing a more effective job in college counseling than occupational counseling and are reinforcing stereotypes of "appropriate" jobs for women.
  10. Few vocational schools make provisions to educate the pregnant teenager who is in need of job skills.

Vocational schools primarily are preparing young women for the traditional role of homemaker rather than wage earner with a wide variety of job options. Yet, seven Federal laws currently guarantee equality of opportunity for women and minorities in education and employment. Sex-segregated occupational programs are in violation of the law and severely limit the educational and career opportunities of women in Vocational Education.

#### RECOMMENDATIONS

1. USOE guidelines should be disseminated to enforce Federal laws guaranteeing full equality for female students and staff in education.
2. Additional women must be hired to serve as faculty in departments of school administration and Vocational Education.
3. Teacher education institutions should encourage and prepare more women to enter administration, especially the superintendency.
4. National, State, and local policy and advisory boards should have equal representation of women and men.
5. Home economics and industrial arts should be desegregated by actively recruiting both young women and men for classes.
6. Consumer and homemaking courses should have defined performance competencies enabling both men and women to assume the dual role of homemaker-wage earner.
7. Curricula should emphasize career awareness and exploration and cooperative work experience programs.
8. Educational materials should portray women--and men--in non-traditional roles and occupations.
9. Inservice training programs should be developed to create awareness of sex-role-stereotyping among teacher trainers and practicing teachers.
10. Counselors should increase their knowledge and experience of the work world in order to inform female students about the wide range of job opportunities available, particularly in higher paying, male-intensive occupations.
11. School programs for pregnant teenagers should be mandated to provide open-ended occupational training in entry-level skills as well as child care and development.
12. Adequate day care services should be established for learning and earning mothers.

female State directors of Vocational Education.

7. Policymakers in vocational-technical Education are overwhelmingly male, with few women elected or appointed to State or National policy and advisory boards.
8. Textbooks, teaching practices, and extra-curricular activities do not promote equal status.
9. Counselors are doing a more effective job in college counseling than occupational counseling and are reinforcing stereotypes of "appropriate" jobs for women.
10. Few vocational schools have provisions to educate the pregnant teenager who is in need of job skills.

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# INTRODUCTION

The mission of the American dream today is to provide the individual with the opportunity to participate in the successful economic participation of the nation to earn a living. In fact, an emerging goal of the American dream is to provide every high school graduate with a skill for entry into the industrial and service sectors as the means to escape poverty and to have success in working and providing and getting a good job. The American dream today may be apt for many boys, but it has never applied to girls.

In the past, a woman's success was dependent upon her wisdom in choosing a husband who was able to provide her with financial security. Her contribution was to be a good wife by establishing and maintaining an orderly household, to provide with good food, which she prepared, clothing, which she purchased or sewed, and the children who were born of the union, whom she reared. Long before the invention of labor-saving household devices, the role of housewife and mother was the only job for most women. In an agrarian world, women worked in the fields beside their husbands, but as unpaid hands and under the same condition as their unpaid jobs as household domestic contributors to their husband's livelihood. The tacit role of the school was to prepare boys to enter the work world and girls to stay at home.

During the nineteenth century, increasing numbers of women were hired to teach in the public schools. Women who wanted to teach had to accept low wages, because of the limited job options open to them elsewhere. Gradually, the majority of public school teachers were women with the invention of the telephone and the typewriter, office work, in addition to the home tasks of preparing and serving food, manufacturing clothing, nursing the sick, and school teaching, was viewed as an appropriate job role for the employment of women. In short, women were admitted to the work place to do labor that was primarily an extension of domestic skills. By 1900, women represented 18.1 percent of the work force, and the steady increase in the percentage of working women continued from then until the present time, as illustrated in Table 1.

During the First World War, women moved into the munitions and armament factories. By 1920, women represented 20 percent of the labor force. World War II provided expanded occupational roles for women who filled the jobs vacated by servicemen in wartime industry such as shipbuilding and aircraft production. At no time, however, did they fill more than five percent of all skilled jobs.<sup>1</sup> The return of servicemen closed off many of the positions of responsibility held by women during the war. However, the growth of new industries following the war opened up new opportunities

<sup>1</sup> Janice Helpert Hedges and Stephen E. Bemis, "Sex Stereotyping: Its Decline in Skilled Trades," Monthly Labor Review, May, 1974.

TABLE 1  
Women in the Labor Force,  
Selected Years, 1900-72

Year	Women in labor force (thousands)	Women in labor force as percent of	
		Total labor force	All women of working age
1900	5,114	18.1	20.4
1910	7,889	20.9	25.2
1920	8,430	20.4	23.3
1930	10,679	22.0	24.3
1940	12,845	24.3	25.4
1945	19,270	29.6	35.7
1950	18,412	28.8	33.9
1955	20,584	30.2	35.7
1960	23,272	32.3	37.8
1965	26,232	34.0	39.3
1970	31,560	36.7	43.4
1972	33,320	37.4	43.8

Note--Data for 1900 to 1940 are from decennial censuses and refer to a single date; beginning 1945, data are annual averages.

For 1900 to 1945, data include women 14 years of age and over; beginning 1950, data include women 16 years of age and over.

Labor force data for 1900 to 1930 refer to gainfully employed workers.

Data for 1972 reflect adjustments to 1970 Census benchmarks.

Source: "The Economic Role of Women," reprinted from Economic Report of the President, 1973. Washington: Women's Bureau, Employment Standards Administration, Department of Labor, 1973, p. 21.

for women in manufacturing and services, as well as in such fields as health, data processing, and government. At the same time, science and technology produced labor-saving appliances which eased household chores and freed more women for work outside the home. Women have been responsible for the major growth of the labor force since 1940 and accounted for three-fifths of the increase between 1960 and 1970.<sup>2</sup>

#### WOMEN IN THE LABOR FORCE TODAY

Today, over 33 million women work in the civilian labor force, women of all ages from 16 to 70, of every race and ethnic group, single, married, divorced, and widowed. By comparison with 1920, these women, with a median age of 36, represent 37 percent of the total labor force.

Women tend to work during two periods of their lives—during youth, when they have completed their education, and in maturity, after their children are grown. Table 2 shows the percentage of women in the labor force by years.

#### Marital Status and Children

A substantial majority—58 percent of all women workers—are married and living with their husbands. Twenty-three percent have never married and 19 percent are widowed or divorced or separated from their husbands. Of all married women, 42 percent are working. Of all single women, 56 percent are working. Of all women divorced or separated, 62 percent are working, but only 25 percent of all widows are working, since many of them are elderly.<sup>3</sup>

A striking comparison among married women workers is offered between those with a husband present and those without. Almost half of all widows, divorcees, or mothers separated from their husbands with children under six are working, whereas only 30 percent of women with a husband present and children under six are working. Two-thirds of all widows, divorcees, or mothers separated from their husbands with school-age children are working, but only half of all mothers with a husband present and school-age children are working. Thus, 13 million women in the labor force in March 1973 had children under six.<sup>4</sup> At the same time, 8.3 million children,

2

Isabelle Straidl, "The Composition of the Nation's Labor Force," Speech at the Regional Seminar/Workshop on Women in the World of Work, Technical Education Research Centers, October, 1973, p. 2.

3

Women's Bureau, "Women Workers Today," Washington: Women's Bureau, Employment Standards Administration, U.S. Department of Labor, 1973, p. 2.

4. Ibid.

TABLE 2

Percent of Women in Labor Force  
by Age, 1973

Age	Percent in Labor Force, 1973
16 and over	45
16 and 17 years	39
18 and 19 years	57
20 to 24 years	61
25 to 34 years	50
35 to 44 years	53
45 to 54 years	54
55 to 64 years	41
65 years and over	9
18 to 64 years	52

Source: Women's Bureau, "Women Workers Today," Washington:  
Women's Bureau, Employment Standards Administration,  
Department of Labor, 1973, p. 2.

or 11 percent, were in one-parent families.<sup>5</sup>

As for women in the skilled trades, they were as likely as all employed women to be married, less likely to be single, and more likely to be widows or divorcees. About half were wives of blue-collar workers—25 percent married to men who worked in the trades and six percent to non-farm laborers. About one-fourth were married to men in white-collar occupations. The rest were wives of men in farm or service occupations.<sup>6</sup>

#### Education and Occupational Distribution of Women

The more education a woman has, the likelier she is to be in the labor force. Seventy percent of all women workers last year had at least a high school education, while one in eight was a college graduate. Half of all women 16 and over who were high school graduates and two-thirds of all those with five years or more of college were working. By contrast, only 22 percent of all women 16 and over with less than an eighth grade education were in the labor force.

The distribution of men and women in the labor force is very different. Most women professionals are teachers, nurses, and other health workers, while men generally work in professions other than teaching or health. Most women are clerical workers, but are less likely than men to be managers or administrators. Almost as many women as men work in factories, but rarely as skilled crafts workers, the occupation of 21 percent of all male workers. While one in five women in the labor force is a service worker, only one of twelve men is similarly employed.<sup>7</sup>

#### Earnings

Among fully employed women who worked year round, annual earnings in 1972 were only 60 percent of men's earnings: \$5,903 for women compared to \$10,202 for men. On jobs demanding equal amounts of skill, time, and

<sup>5</sup> Elizabeth Waldman and Robert Whitmore, "Children of Working Mothers, March, 1973," Monthly Labor Review, May, 1974, p. 50.

<sup>6</sup> Ibid., p. 15.

<sup>7</sup> "Women Workers Today," op. cit., pp. 2-4.

TABLE 3

Occupational Distribution of Workers  
by Sex, 1973

Occupation	Women	Men
Managers & administrators	5	13
Private household workers	5	-
Sales workers	7	-
Professional & technical workers	14	14
Operatives	13	19
Service workers outside the home	17	-
Clerical workers	35	7
Nonfarm laborers	-	8
Craft workers	-	21
Other	4	18

Source: "Women Workers Today," Washington: Women's Bureau, Employment Standards Administration, Department of Labor, 1973, p. 5.

effort, substantial differences remain between the earnings received by women and men. Even after adjusting for dissimilarities in training, continuity at work, and education, a differential of about 20 percent remains between the earnings of women and men. The more prestigious the occupational category, the closer women come to narrowing the income gap. Professional and technical working women earned 68 percent of men's incomes by making an average of \$8,796 in 1972. However, saleswomen, who tend to be in lower paying retail rather than wholesale selling, earn only 40 percent as much as men, or \$4,575. Fully employed women high school graduates earn less than fully employed men with fewer than eight years of school.

The white male was consistently the top wage earner in 1969, with an increasing ratio between years of school completed and median earnings. Salaries ranged from \$6,717 for white males with eight years of school or less to a high of \$13,436 for white males with five or more years of college. Women consistently earned less than men. In fact, all females with five years or more of college had median earnings commensurate to white males who had not completed high school. Black women earned the least, in fact, half as much as white males. However, the gap narrowed slightly for all female college graduates, particularly black college women. Table 4 illustrates that the more education adults attain, the higher their median earnings, with women invariably earning less than men.

Even more definitive, a comparison can be made of earnings of men and women by occupational groups and years of school completed.

#### Earnings and Education

The positive relationship between earnings and education is apparent when comparisons are made for women and men for Fiscal Year 1969 with additional comparisons for females by race.

Table 5 illustrates that occupational groups receive different median earnings, with professional and technical workers earning the highest and

8 "The Economic Role of Women," reprinted from Economic Report of the President, 1973, Washington: Women's Bureau, Employment Standards Administration, U.S. Department of Labor, 1973, p. 106.

9 "Women Workers Today," op. cit., p. 6.

10 Women's Bureau, "Twenty Facts on Women Workers," Washington: Women's Bureau, Employment Standards Administration, U.S. Department of Labor, 1972, p. 2.

TABLE 4

Earnings of Total and White Males and Females,  
and Negro and Spanish-Origin Females 25 to 64  
Years of Age and Years of School Completed: 1969

	Median earnings 0-8 yrs. school	Median earnings 1-3 yrs. high school	Median earnings 4 yrs. high school
Total male	6,368	7,890	8,805
White male	6,717	8,161	8,951
Total female	3,072	3,545	4,186
White female	3,354	3,671	4,212
Black female	2,193	2,881	3,910
Spanish-origin female	2,974	3,471	4,087
	Median earnings 1-3 yrs. college	Median earnings 4 yrs. college	Median earnings 5 yrs. college or more
Total male	9,745	12,507	13,309
White male	9,907	12,674	13,436
Total female	4,824	6,523	8,176
White female	4,810	6,504	8,164
Black female	4,885	6,742	8,478
Spanish-origin female	4,595	5,717	6,837

Source: Bureau of the Census, "Earnings by Occupation and Education," 1970 Census of Population, Washington: Department of Commerce, January, 1973, Tables 1, 2, 7, and 8.

private household service workers receiving the lowest median earnings. Women's median earnings in 1970 as a percentage of men's range from a low of 43 percent for salesworkers to a high of 67 percent for professional and technical workers.

Unfortunately for American women workers, the higher the average earnings for an occupational group, the fewer the number of women who are employed in that group. Women tend to be clustered in those occupations which pay the least. Whereas women are 76 percent of all clerical workers, women average only 64 percent of men's earnings in the same occupations. Conversely, with 21 percent of all men employed as craftworkers and foremen in 1973, only four percent of women are in the craftworkers-foremen group, where they make 55 percent of men's earnings. Far worse, household work, in which four percent of all women workers are employed, afforded a full-time, year-round median wage of \$1,981 in 1971.<sup>11</sup>

For men, the returns on the investment in education are high in terms of money and status. Women do not obtain returns equal to men's. Female-intensive clerical work, in which 12 percent of the women were college graduates, had median earnings for women of \$5,551, whereas men in clerical work, only five percent of whom were college graduates, had median earnings of \$8,617. The education and talent of women seriously are underutilized, a waste to them and a loss to society. Women who stay in the labor market continuously ~~earn~~ only two-thirds the amount earned by men in the same occupation. Lower job status for women is accompanied by greater rates of unemployment. Whereas men had a 4.9 percent rate of unemployment in 1972, women experienced an unemployment rate of 6.6 percent.<sup>12</sup> While education assists in equalizing women's position with that of men, the problems of under-pay and underutilization of female talent continue.

#### Contributions to the Family Income

Women work because of economic need. Two-thirds of all women workers are either in the combined classifications "single, divorced, widowed, or separated" or their husbands earn less than \$7,000 a year. Only three percent of all husband-wife families had poverty incomes.<sup>13</sup> Working wives employed full-time, year-round contributed almost two-fifths of the family

<sup>11</sup> Economic Problems of Women, Hearings before the Joint Economic Committee, Congress of the United States, Ninety-third Congress, First Session, Part I, July 10, 11, and 12, 1973, Washington: U.S. Government Printing Office, 1973, p. 17.

<sup>12</sup> Shirley McCune, "Vocational Education: a Dual System," Inequality in Education, March, 1974, pp. 28-34.

<sup>13</sup> Women's Bureau, "Twenty Facts on Women Workers," op. cit., p. 1.

TABLE 5

Occupational Distribution of Employed Persons by Education, Sex, and Income, 1970

Occupational Groups	High School				College Graduates		Median Income of Year-Round Full-Time Workers*	
	1-3 Years		4 Years		Percent Men	Percent Women	Men	Women
	Percent Men	Percent Women	Percent Men	Percent Women				
Professional, technical and kindred workers	28	3.6	7.6	7	58.9	77.4	\$ 7,806	\$ 7,878
Managers and proprietors	6.9	2.9	11.4	3.8	26.1	4.8	12,117	6,834
Salesworkers	5.6	10.2	7.5	8.1	8.6	2.3	9,750	4,184
Clerical and kindred workers	6.8	25.3	10.0	50.4	4.9	12.1	8,617	5,551
Craftsmen	25.6	2.4	26.4	1.8	3.3	.4	9,254	5,089
Operatives	27.3	22.5	20.6	11.4	1.4	.6	7,623	4,510
Nonfarm Laborers	9.9	1.6	5.3	.8	.5	.1	6,563	4,291
Farm Laborers & Foremen	1.9	.6	.9	.3	.2	.1	3,519	---
Farmers & farm managers	2.2	2	2.9	.2	.8	.1	1,260	---
Service workers excluding private household	10.8	25.4	7.5	14.5	1.4	1.9	6,955	3,953
Private household service workers	.2	5.2	(1)	1.7	(1)	.3	---	2,101

\*Less than one tenth of 1 percent.

Note--Detail may not add to totals because of rounding.

Source: Bureau of the Census, Department of Commerce.

\*Source: Economic Problems of Women, Hearings before the Joint Economic Committee, Congress of the United States, Ninety-third Congress, first Session, Part I, July 10, 11, and 12, 1973, Washington: U.S. Government Printing Office, 1973, Table 27, p. 102.

income. Twelve percent of all working wives contributed half or more of the family income. These women often determine the difference between middle and low incomes of families.

As for women who are heads of households, 53 percent were in the labor force in March 1973, two-thirds of them the only wage earner in the family. Two out of five families in poverty are headed by a woman. For the population as a whole, one out of ten families has a woman as head of the household and one of ten working women is likewise the head of the household.<sup>14</sup> At the same time, about 11.5 million children under 18 were in families<sup>15</sup> with the father absent, unemployed, or out of the labor force. Family incomes were better if mothers worked. The median family income in 1972 was \$5,750 if mothers worked and \$3,495 if they did not.<sup>16</sup>

#### Women and Poverty

Families with a female head are increasing in our society. Between 1960 and 1972, the numbers of households dependent upon women increased 56 percent, from 9.5 million to 14.8 million.<sup>17</sup> Divorce and separation force many women without wage-earning skills into the primary support role for their children and themselves. Of low-income families, 43 percent are headed by a working woman.<sup>18</sup> Close to two-thirds of all female-headed households include children. Unless the single parent has adequate alimony or pension, she is likely to face financial difficulty. The median income for female-headed families in 1971 was \$5,116--less than half the income of male-headed families. A female family head has the additional burden of expenses for child care when she is absent from the home. Whereas one in ten households is headed by a woman, 34 percent were below the low-income level compared to seven percent for male-headed households. In 1971,

<sup>14</sup> Ibid., and, Women's Bureau, "Women Workers Today," op. cit., p. 7.

<sup>15</sup> The Bureau of the Census provides a definition for "household" and "family." "A household includes all the persons who occupy a group of rooms or a single room which constitutes a housing unit; a family consists of a household head and one or more other persons living in the same household who are related to the head by blood, marriage or adoption."

<sup>16</sup> Waldman and Whitmore, op. cit., pp. 52-53.

<sup>17</sup> Barbara R. Bergman, "A Policy Agenda for Women's Economic Problems," Testimony at hearings of the Joint Economic Committee on the Economic Problems of Women, July 10, 1973, p. 5.

<sup>18</sup> Letty Cottin Pogrebin, "The Working Woman," Ladies Home Journal, May, 1974, p. 82.

lesser earnings, fewer opportunities for promotion, especially in apprenticeships; and under-representation in union policy positions. However, the new Coalition of Labor Union Women offers the hope that at last women may succeed in narrowing the inequities in blue-collar and white-collar employment, while gaining opportunities in skilled crafts. If women are to receive equal opportunities for employment, pay, and promotion, vocational programs must prepare young women for a broader range of occupations.

30 percent of households headed by a woman received public assistance payments.<sup>19</sup>

In 1972, 9.2 million, or 44 percent, of all children were in families below the low-income level of \$4,277 for a non-farm family of four headed by a man and \$4,254 if headed by a woman.<sup>20</sup>

The problems of poverty and women are intensified by race. Twenty-seven percent of the females heading households are blacks. For them, the median family income was only \$3,645, and 54 percent were below the low-income level.<sup>21</sup> Among black children, the proportion of poor was 71 percent in "mother only" families and 24 percent in two-parent families.<sup>22</sup> More than half of all poor Puerto Rican families are headed by a woman. Divorce and separation among minority women are acute problems.<sup>23</sup>

As for unemployment among women, six percent were unemployed in 1973 compared with four percent of all men. For young women 16 to 19 years, the unemployment rate was 15 percent, but dropped to five percent for those 20 years of age and older. For minority women of all races, 10 percent were unemployed: 34 percent of all minority women 16 to 19 years and eight percent of those 20 years of age and over.<sup>24</sup> Thus, the financial problems of female heads of households are disturbingly high among black and other minority women, and there are no signs of improvement.

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<sup>19</sup> "The Economic Role of Women," op. cit., p. 108.

<sup>20</sup> Waldman and Whitmore, op. cit., p. 55.

<sup>21</sup> "The Economic Role of Women," op. cit.

<sup>22</sup> Waldman and Whitmore, op. cit.

<sup>23</sup> Manpower Report of the President, U.S. Department of Labor, Washington: U.S. Government Printing Office, March 1973, p. 101.

<sup>24</sup> "Women Workers Today," op. cit., p. 6.

### Child Care

At the present time, very little information is available about the current number of child care facilities in this country. The last Nation-wide study on child care arrangements was published in 1968, based upon mothers who had worked in 1964.<sup>25</sup> Such studies have a common finding: most young children receive care in a private home--their own or someone else's, sometimes a relative's, during their mothers' working hours. A survey of day care facilities in 1970 estimated that 1.3 million children were in licensed and unlicensed full-time day care. Child care services range from developmental centers offering a variety of health and social services to "custodial" centers, which vary in size and quality. Unfortunately, there are no firm plans for a Nation-wide survey of child care services.<sup>25</sup>

### Women on Welfare

Women without husbands have four possible sources of support: alimony, pensions, welfare, or a job. Those with small children have the complicating factor of child care. While many choose to stay at home, others are forced to stay at home, because of limited day care facilities. The largest group of working-age adults on welfare are the two and one-half million mothers with no able-bodied male present. Federally assisted welfare recipients were distributed as follows:

Children	55.9%
Mothers	16.7%
Aged	14.9%
Blind and disabled	11.7%
Able-bodied fathers	0.9% <sup>26</sup>

Together, mothers and children comprise 73 percent of all welfare recipients. Forty-four percent of the mothers are needed at home for child care or they are disabled or they need extensive rehabilitative treatment and hence are not immediately employable. However, 34 percent are employable, given adequate day care and job training. A study by Brookings Institution of welfare recipients revealed that mothers on welfare tend to have high aspirations and consider work important to their self-esteem. These mothers, in turn, transmit a positive work value to their sons. However, women who find welfare more acceptable also show the lowest work activity. Yet, black women who left the Work Incentive Program (WIN II) without finding a job showed increased acceptability of welfare. Evidently, many black welfare women want to work, but because they have failed so often in their attempts to find a job, they believe they would fail if they tried again.<sup>27</sup>

<sup>25</sup> Waldman and Whitmore, *op. cit.*, pp. 56-57.

<sup>26</sup> "Welfare Myths vs. Facts," Washington: Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare.

The impact of long term public assistance to the self-concept of the female head of household is extremely destructive. Unfortunately, there is a multiplier effect on other members of the family whose self-concept also is influenced negatively by economic dependence upon welfare, which is viewed generally as a symbol of human failure by the middle class American majority whose work ethic is firmly entrenched. Thus, each generation on welfare is affected adversely not only by financial failure, but also by human failure, and the poverty cycle becomes difficult to break. The human cost to the individual is the most destructive result of welfare in our society.

A recent report, "Women and Poverty," reveals that three-fourths of all persons receiving welfare payments and public assistance are women.<sup>28</sup> Fifteen percent of the mothers are in such low-paying jobs that a welfare supplement is necessary for bare survival. Seven percent are currently in work training programs. Undereducated, but employable, mothers are a wasted human resource. Vocational schools would be in a position to prevent the underutilization of women if training programs were adapted to teach wage-earning competencies to girls and boys alike in occupations affording adequate opportunities and pay.

#### WOMEN IN THE UNIONS

Women with little education usually seek employment in blue-collar occupations, in service work outside of the home, or as private household workers. The growing concentration of employed women in the white-collar jobs of teaching, office, and health during the second half of the nineteenth century was marked by a concomitant diminishment of men in these fields. Occupations which are role-differentiated as "women's work" traditionally have paid less than "men's work"—regardless of educational requirements. Although women worked in factories beside men during the rise of the Industrial Revolution, they were assigned to the menial, low-paying tasks.

With the development of labor unions to improve economic and working conditions of blue-collar workers, protective legislation was enacted to "protect" women and children from long hours and from unhealthy and unsafe working conditions. Unfortunately, "protective" legislation was in many instances "preventive" legislation which successfully closed off many avenues of blue-collar employment to women. At the turn of the century, feminists joined forces with labor to improve conditions for both men and women.

27

Leonard Goodwin, "Do the Poor Want to Work?" Poor People and Public Policy, Brookings Research Report 129, Washington: The Brookings Institution, 1972, p. 6.

28

Judith Frutig, "Her Children Go Hungry One Week Every Month," The Christian Science Monitor, June 26, 1974, p. 4.

Historically, women in the trade unions have been discriminated against in three important categories: in earnings; in opportunities for advancement, especially through apprenticeship programs; and in representation among union policy makers. Although women members benefitted from the economic gains achieved by union bargainers, they traditionally have been in lower paying positions with resultant lower annual wages.

A study by the Bureau of the Census revealed that union workers earn higher wages than non-union workers in most of the occupations which permit comparisons. Between union and non-union workers employed at any time during the year, the difference in median earnings was \$1,540 for women and \$1,517 for men. Union women received lower wages, however, than union men in all comparable occupations in the study.<sup>29</sup> The income disparity between union women and union men is lessened among union members, as these figures indicate. The median income of women union members was about 80 percent higher than non-union working women among private wage and salary workers in 1970, including blue-collar workers, white-collar workers, and service workers (including private household workers). The comparable advantage for male union members was only 30 percent. However, the earnings gap between men and women was narrower among white-collar and service union members than among union members who were blue-collar workers in 1970.

- White-collar union women earned 80 percent less than union men;
- White-collar non-union women earned 180 percent less than non-union men;
- Service worker union women earned 70 percent less than service worker union men;
- Service worker non-union women earned 120 percent less than service worker non-union men;
- Blue-collar union women earned 100 percent less than blue-collar union men;
- Blue-collar non-union women earned 90 percent less than blue-collar non-union men.

Thus, while the earnings differential between union women and men in 1970 was less among white-collar and service workers, the differential between union blue-collar women and men was higher than the earnings differential between non-union blue-collar women and men.<sup>30</sup>

<sup>29</sup> Lucretia M. Devey, "Women in Labor Unions," Monthly Labor Review, February, 1971, p. 44.

<sup>30</sup> Edna E. Raphael, "Working Women and their Membership in Labor Unions," Monthly Labor Review, May, 1974, pp. 27-28.

Trade union women represent 21 percent of organized labor, a small population compared to the number of women in the labor force, 37 percent in 1970.<sup>31</sup> Yet, for all private wage and salary workers and for blue-collar workers, the declines in union membership were greater among women than among men. Membership rose by 0.4 percent among women service workers, while it declined most among operatives, with an eight percent loss. One of seven American women workers is a union member compared to three of ten men workers. Table 6, based on statistics from the U.S. Department of Labor presented by U.S. News and World Report, November 13, 1972, shows the size and percentage of female membership among the ten trade unions with the largest aggregation of women.

Statistics provided by the United Automobile Workers and shown in Table 7 suggest the problems many women unionists face in male-dominated labor organizations. Estimated UAW women members comprise approximately 15 percent of the total membership and hold one-eighth of the international union executive positions; 16 percent of the local union elected positions--six percent of the presidents and vice-presidents and 27 percent of the secretaries; seven percent of the collective bargaining positions; two percent of international representatives; and seven percent of the convention delegates. It should be noted that in labor organizations the power positions tend to be in collective bargaining, where women are seriously under-represented, and on international policy boards, where women are only 2.5 percent of the appointees.

Until recently, union women generally were not allied with the women's rights movement. When the Equal Rights Amendment was under consideration by Congress in 1971, Myra Wolfgang, Vice-President, Hotel, Restaurant Employees, and Bartenders International Union, appeared before the Judiciary Committee of the House of Representatives to oppose ERA, while Olga Madar, Vice-President, United Automobile Workers, supported the proposed amendment. Despite some differences between labor and the women's movement, trade union women have been organizing their forces for a stronger voice in unions and on the job, as evidenced by the increasing numbers of women's conferences being sponsored by labor organizations, including the Communications Workers of America, the International Union of Electrical Workers, and the United Automobile Workers. Their primary concerns are the earnings and opportunity gap between men and women and the political powerlessness of women workers. Women comprise less than one percent of the registrants in apprenticeship training programs and four percent of all crafts workers<sup>32</sup> and supervisory positions, despite being 21 percent of the total membership.

Spokeswomen for four of these organizations reflect a variety of opinions. Myra Wolfgang describes the present status of women in the union as:

<sup>31</sup> "Women Workers: Gaining Power, Seeking More," U.S. News and World Report, November 13, 1972, p. 104.

<sup>32</sup> IBid.

TABLE 6  
Ten Unions with the Largest Aggregation of Women

Unions	Total Women	Women as Percentage of all Union Members
1. Ladies' Garment Workers	353,870	80
2. Clothing Workers	289,500	75
3. Electrical Workers (IBEW)	276,510	30
4. Teamsters	255,000	14
5. Communications Workers	231,800	55
6. Automobile Workers	193,130	13
7. Service Employees	151,250	35
8. State & County Employees	146,680	33
9. Steelworkers	120,800	10
10. Electrical Workers (IUE)	105,000	35

Source: "Women Workers: Gaining Power, Seeking More," U.S. News and World Report, November 13, 1972, p. 104.

TABLE 7  
Aggregation of Members in UAW Jurisdiction by Companies  
and by Sex in 1972 and 1973\*

Name of Company	Total Members	Males	Female	Percent Females
General Motors (Hourly) (1972)	415,000	353,541	61,459	14.8
Ford Motors (Hourly) (1972)	163,000	146,500	16,500	10.1
Chrysler (Incl. Salary) (1972)	127,000	115,184	11,816	9.3
Dana (Incl. Salary) (1973)	8,879 (Approx.)	7,905	974	11.0
Eltra (Hourly) (1973)	5,100	3,404	1,696	33.2
Hoover (Hourly) (1973)	2,088	1,113	975	46.7
	721,067	627,847	93,420	12.9

\*Incomplete aggregation

Source: United Automobile Workers, as of January 30, 1974.

... the same as the opportunities for women everywhere. No union constitution bars women, but that is not to say there is no discrimination. Changes won't flow from the union, but from the society. Certain labor standards are desirable. It is not desirable for women not to have standards. I favor retaining standards for women until men are included.

If the goal is desirable to increase the number of women in industrial employment, then we must end discrimination by enforcing the laws we now have. Society must also direct its attention to child care by tripartite efforts of workers, industry, and government.<sup>33</sup>

Mozell McNorriell, Vice-President, International Union, American Federation of State, County, and Municipal Employees, describes areas of discrimination against women in the union:

... All the court officers are male. There is limited opportunity for upward promotion; yet our membership is 50 percent male, 50 percent female. Women won't file civil rights complaints because they fear reprisal in promotions later on, but we are using the grievance procedure in cases of sex discrimination. There is one woman on the 21-member policy board of the International Union and a paid staff of two women and 15 men. However, it is difficult to get women to vote for other women as officers.

Child care is not a problem for public employees. Sometimes clerical and professional workers see things differently from other workers.<sup>34</sup>

Olga Madar, Vice-President, International Union, United Automobile Workers, summarizes the issues as follows:

Women in unions are on the ascendancy. Women are under-represented in elected and appointive positions. Women are active, but they are under-represented in power positions and in collective bargaining. Yet, Unions with women in the majority carry on collective bargaining well.

33

Interview with Myra Wolfgang, Secretary-Treasurer, Hotel, Motel, Restaurant Employees, Cooks, and Bartenders Union, Local 24, and Vice-President, Hotel, Restaurant Employees, and Bartenders International Union, Detroit, Michigan, June 18, 1974.

34

Interview with Mozell McNorriell, Vice-President, International Union, American Federation of State, County, and Municipal Employees, AFL-CIO, Detroit, Michigan, June 18, 1974.

Women ought to have more opportunity for employment in the industrial sector. Women were in the plants during World War II in every classification. There are no inappropriate areas of employment. If working conditions are bad for a female they are bad for any person. We ought to have good working conditions for all.

Apprenticeship programs are getting better, but we need to open up training opportunities, apprenticeship, and skilled trades to include more women . . . Women haven't learned how to be politicians, but we are beginning to put down the notion that women won't vote for another woman . . . We ought to have comprehensive day care facilities financed by communities, industries, and government. Women were the first activists, but they didn't look at cultural attitudes. They accepted their subservient role outside of the workplace. The Women's Lib movement has done more than the activists and militant union women of yesterday to take a realistic look at cultural attitudes shared by men and women.<sup>35</sup>

Gloria Johnson, Director of Education and Women's Activities, International Union of Electrical, Radio, and Machine Workers, also addresses attitudinal problems:

My own feeling is that there are strong similarities to attitudes that blacks used to have: a fear of losing, or rejection, if a woman does step forward to take an active role; a feeling of 'I've never done it before so I might fail'; a feeling that one's husband might object; and always, of course, the problem of time, because of domestic responsibilities as well as work.

But, judging by an IUE survey, these attitudes are changing. In our opinion, we have women in what we call social-action programs, we have women's committees in the locals, and the districts are beginning to have their own women's conferences.<sup>36</sup>

One of the current developments among trade union women is the formation of a coalition which merged more than 3,000 women members of 58

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Interview with Olga Madar, Vice-President, International Union, United Automobile Workers; Director of Conservation and Resource Development; Recreation and Leisure Time Activities; Consumer Affairs Department; Technical Office Professional Services Department, Detroit, Michigan, July 2, 1974.

36

"Women Workers: Gaining Power, Seeking More," *op.cit.*, p. 106.

unions in late March 1974 into a National organization, the Coalition of Labor Union Women. Its purpose is to work for women's rights within trade unions. The objectives are the following:

1. Positive action by unions against sex discrimination in pay, hiring, job classification, and promotion;
2. A livable minimum wage, improved medical and pension benefits, improved health and safety laws, and better enforcement of these laws;
3. Increased participation of women in union affairs, particularly in policy-making positions;
4. Increased union efforts to organize women workers;
5. Support of legislation for child care;
6. Legislation to extend to all workers protective statutes such as maximum hours limitations, breaks in the workday, and seating of workers; and
7. Mass action in behalf of the Equal Rights Amendment.<sup>37</sup>

The coalition is headed by Olga Madar, President; Addie Wyatt, Director, Women's Affairs, Amalgamated Meat Cutters and Butcher Workers Union, Vice President; and Gloria Johnson of AUE, Treasurer. The Statement of Purpose is as follows:

Of the 34 million women in the work force--little more than 4 million women are members of unions. It is imperative that within the framework of the union movement we take aggressive steps to more effectively address ourselves to the critical needs of 30 million unorganized sisters and to make our unions more responsive to the needs of all women, especially the needs of minority women who have traditionally been singled out for particularly blatant oppression.

Women unionists work in almost every industry, in almost every part of the country. Despite their geographical, industrial and occupational separations, union women share common concerns and goals.

Full equality of opportunities and rights in the labor force require the full attention of the labor movement . . . and especially, the full attention of women who are part of the labor movement.

The primary purpose of this new National coalition is to unify all union women in a viable organization to determine, first - our common problems and concerns and, second - to develop action programs within the framework of our unions to deal effectively with our

<sup>37</sup> Raphael, *op. cit.*, p. 33.

objectives. Through unity of purpose, the Coalition of Labor Union Women will seek to accomplish these goals. We recognize that our struggle goes beyond the borders of this Nation and seek to link up with our working sisters and brothers throughout the world through concrete action of international workers' solidarity.<sup>38</sup>

This process would be simplified if vocational and manpower training programs provided women with basic readiness training in new and growing fields of employment. Upward mobility for women also can be accomplished by increasing the number of women supervisors and apprentices in all skilled trades, thus, ultimately increasing women craftworkers.

If the trade union women succeed in their efforts to raise the number of women on international union policy boards, they will be in a position to influence pay scales and job opportunities for women, particularly employable welfare mothers, while improving working conditions for men and increasing child care facilities for workers in other areas of employment. Mozell McNortriell had these additional suggestions;

The schools could do more to encourage young people to seek more education. High school counselors are not doing the job . . . we need courses in labor history and the union movement in the public schools.

#### SUMMARY

Over 33 million women, representing 44 percent of all women of working age, comprise 37 percent of the labor force today. The more education a woman has, the likelier she is to work outside the home. Women are concentrated in teaching, health, and office occupations in contrast to the broad range of higher paying occupations in which men are distributed. Women's earnings in 1972 were only 60 percent of men's earnings, but the more prestigious the occupation, the closer women came to narrowing the earnings gap. The more education adults attain, the higher their median earnings, although women earn consistently less than men.

Women work because of economic need, contributing two-fifths of the family income and often determining the difference between poverty and middle incomes for their families. Of low-income families, 43 percent are headed by a working woman; of low-income black families, 64 percent are headed by a woman. Two and one-half million women are mothers on welfare, and without the advantages of skill training and child care services they cannot work.

Women trade union members represent 21 percent of organized labor, but they have suffered the same inequities as other American women workers:

<sup>38</sup> "Statement of Purpose, Structure and Guidelines," adopted by Coalition of Labor Union Women, Founding Conference, Chicago, Illinois, March 23-24, 1974, p. 3.

lesser earnings, fewer opportunities for promotion, especially in apprenticeships; and under-representation in union policy positions. However, the new Coalition of Labor Union Women offers the hope that at last women may succeed in narrowing the inequities in blue-collar and white-collar employment, while gaining opportunities in skilled crafts. If women are to receive equal opportunities for employment, pay, and promotion, vocational programs must prepare young women for a broader range of occupations.

## REFERENCES

Bergman, Barbara, R. "A Policy Agenda for Women's Economic Problems." Testimony at hearings of the Joint Economic Committee on the Economic Problems of Women. July 10, 1973.

Bureau of the Census. "Earnings by Occupation and Education." 1970 Census of Population. Washington: Department of Commerce, January, 1973.

Bureau of the Census. Statistical Abstract of the United States. Washington: U.S. Government Printing Office. 1973.

Dewey, Lucretia M. "Women in Labor Unions." Monthly Labor Review. February, 1971.

Economic Problems of Women. Hearings before the Joint Economic Committee, Congress of the United States, Ninety-third Congress, First Session, Part I, July 10, 11, and 12, 1973. Washington: U.S. Government Printing Office. 1973.

"The Economic Role of Women." Reprinted from Economic Report of the President, 1973. Washington: Women's Bureau. Employment Standards Administration, U.S. Department of Labor. 1973.

Frutig Judith. "Her Children Go Hungry One Week Every Month." The Christian Science Monitor. June 27, 1974.

Goodwin, Leonard. "Do the Poor Want to Work?" Poor People and Public Policy. Brookings Research Report 129. Washington: The Brookings Institution. 1972.

Hedges, Janice Neipert and Stephen E. Bemis. "Sex Stereotyping: Its Decline in Skilled Trades." Monthly Labor Review. May, 1974.

Manpower Report of the President. U.S. Department of Labor, Washington: U.S. Government Printing Office. March, 1973.

McCune, Shirley. "Vocational Education: a Dual System." Inequality in Education. March, 1974.

Pogrebin, Letty Cottin. "The Working Woman." Ladies Home Journal. May, 1974.

Raphael, Edna E. "Working Women and Their Membership in Labor Unions." Monthly Labor Review. May, 1974.

"Statement of Purpose, Structure and Guidelines." Adopted by Coalition of Labor Union Women, Founding Conference, Chicago, Illinois. March 23-24, 1974.

Streidl, Isabelle. "The Composition of the Nation's Labor Force." Speech at the Regional Seminar/Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

Waldman, Elizabeth and Robert Whitmore. "Children of Working Mothers, March, 1973." Monthly Labor Review. May, 1974.

"Welfare Myths vs. Facts." Washington: Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare.

Women's Bureau. "Twenty Facts on Women Workers." Washington: Women's Bureau. Employment Standards Administration, U.S. Department of Labor. 1972.

Women's Bureau. "Women Workers Today." Washington: Women's Bureau. Employment Standards Administration, U.S. Department of Labor. 1973.

"Women Workers: Gaining Power, Seeking More." U.S. News and World Report. November 13, 1972.

"Statement of Purpose, Structure and Guidelines." Adopted by Coalition of Labor Union Women, Founding Conference, Chicago, Illinois. March 23-24, 1974.

Streidl, Isabelle. "The Composition of the Nation's Labor Force." Speech at the Regional Seminar/Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

Waldman, Elizabeth and Robert Whitmore. "Children of Working Mothers, March, 1973." Monthly Labor Review. May, 1974.

"Welfare Myths vs. Facts." Washington. Social and Rehabilitation Service, U.S. Department of Health, Education, and Welfare.

Women's Bureau. "Twenty Facts on Women Workers." Washington: Women's Bureau. Employment Standards Administration, U.S. Department of Labor. 1972..

Women's Bureau. "Women Workers Today." Washington: Women's Bureau. Employment Standards Administration, U.S. Department of Labor. 1973.

"Women Workers: Gaining Power, Seeking More." U.S. News and World Report. November 13, 1972.

## CURRENT STATUS OF VOCATIONAL-TECHNICAL EDUCATION FOR FEMALES

The primary purpose of this report is to review Vocational-Technical Education for girls and women in the United States and to analyze educational conditions and practices which have an impact upon women in the world of work. The present inequities for women in employment, in pay, and in promotion were identified in the first chapter. This chapter will describe current programs, enrollments, expenditures, and practices in Vocational-Technical Education as well as identify factors which contribute to the present inequities for women in education and in employment, conditions which will continue unless measures are taken to change current educational practices.

ENROLLMENTS IN VOCATIONAL-TECHNICAL EDUCATION

Total secondary school enrollment in 1972 was 14,100,000 of which about 40 percent were enrolled in Vocational Education courses in grades 9-12.<sup>1</sup> A total of 11,602,144 persons were enrolled in secondary, post-secondary, and adult Vocational Education programs in 1972, an increase of 10.5 percent above enrollments in 1971. Between 1970 and 1972, the proportion of female students remained rather constant at about 55.5 percent. While females accounted for almost two-thirds of all secondary vocational enrollments, they comprised 39.9 percent of the post-secondary enrollments and about 46 percent of the adult education enrollments.<sup>2</sup> Table 8 summarizes the distribution of enrollments in Vocational Education by level, target group, and sex for 1970 and 1972.

FEMALE STUDENTS IN VOCATIONAL-TECHNICAL PROGRAMS

Student enrollments in Vocational Education programs show sharp differences in terms of male and female distribution. According to the most recent figures, boys are concentrated in agriculture, technical education, and in trade and industrial programs. Girls are concentrated in home economics, health, and office occupations. However, 92 percent of female enrollments in home economics are in non-wage-earning consumer and home-making programs.<sup>3</sup> In the two other large occupational programs for females, girls make up 84.7 percent of the health occupations and 76.4 percent of the office occupations. Table 9 shows the distribution and sex of students enrolled in Vocational Education programs in 1972.

<sup>1</sup> Division of Vocational and Technical Education, Trends in Vocational Education Fiscal Year 1971, Washington: Office of Education, U.S. Department of Health, Education, and Welfare, May, 1973, p. 6.

<sup>2</sup> Ibid., p. 2.

<sup>3</sup> Division of Vocational and Technical Education, Summary Data Vocational Education Fiscal Year 1972, Washington: Office of Education, U.S. Department of Health, Education, and Welfare, May 1973, pp. 1-2.

TABLE 8

Distribution of Enrollments in Vocational Education  
by Level, Target Group, and Sex, 1970-1972\*

	Enrollments		% Distribution % Female		
	1970	1972	1970	1972	1970
Secondary	5,114,451	7,231,648	58.2	62.3	62.6
Postsecondary	1,013,426	1,304,092	11.5	11.2	39.3
Adult	2,666,083	3,066,404	30.3	26.4	46.1
Disadvantaged	(805,384)	(1,616,621)	(9.2)	(13.9)	--
Handicapped	(115,219)	(221,342)	(1.3)	(1.9)	--

\*Includes below grade 9.

Source: Division of Vocational and Technical Education,  
Trends in Vocational Education Fiscal Year 1972, Washington:  
Office of Education, Department of Health, Education, and  
Welfare, May, 1973, pp. 5, 7, and 19.

TABLE 9  
Vocational Education Distribution of Total Enrollments  
and Percentage by Sex and Program, 1972\*

	Total Enrollments in Vocational Education	% of Total Enroll- ment	Female Enrollments	Male Enrollments	Percent Female	Percent Male	Females as % of Total
Agriculture	896,460	7.7	48,153	848,307	5.4	94.6	.4
Distribution	640,423	5.5	290,020	350,403	45.3	54.7	2.5
Health	336,652	2.9	285,071	51,581	84.7	15.3	2.4
Home Economics	3,445,698	29.7	377,935	287,763	91.6	8.4	27.2
Gainful Consumer	(279,966)	(2.4)	(298,898)	(39,018)	(86.1)	(13.9)	(2.0)
Homemaking	(3,165,732)	(27.3)	(2,916,987)	(248,745)	(92.1)	(7.9)	(25.1)
Office	2,351,878	20.3	796,387	555,491	76.4	23.6	15.5
Technical	337,069	2.9	33,006	304,063	9.8	90.2	.3
Trade & Industry	2,397,968	20.7	277,680	2,118,288	11.7	88.3	18.3
Special Programs	1,304,619	11.2	582,716	721,904	44.7	55.3	5.0
Total	11,602,144	100.9	6,422,115	5,180,029	--	--	55.8

\*Includes below grade 5.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education  
Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and  
Welfare, May, 1973, p. 1.

Home economics, trade and industrial, and office occupations account for 71 percent of all enrollments in Vocational Education. Home economics is the largest program, with almost 30 percent of all enrollments, trade and industrial enrolls 20.7 percent, and office occupations has 20.3 percent. In terms of total enrollments, the percentage of females in home economics is 27.2 percent. Females in gainful home economics comprise only two percent of the total enrollments in all vocational areas. Thus, 25 percent of all Vocational Education enrollments are females in consumer and homemaking--programs which are not designed to provide wage-earning skills.

Further analysis reveals that the only vocational area where males and females enroll in almost equal numbers is in distributive education--54.7 percent male and 45.3 percent female.

Males comprise 94.6 percent of agricultural students, but their enrollments account for only seven percent of all enrollments in Vocational Education. Males account for 90.2 percent of technical enrollments, but less than three percent of the total. Trade and industrial is 88.3 percent male, but 18 percent of the total vocational enrollment.

Enrollments by specific Office of Education instructional title reflect patterns which limit later earnings for young women by leading to lower-paying jobs than male-intensive programs. Tables 10 through 17 compare male and female enrollments with the total enrollment in each occupational area.

#### Agriculture

Females comprise only five percent of total enrollments in agriculture. The only course enrolling a sizeable minority of females is ornamental agriculture, with almost 27 percent of the program's enrollments.

Agriculture may become a source of employment for an increased, but limited, number of women in the 1970s. The growth of farming, new methods of food production, and food export will be imperative to meet the critical food shortages of an expanding world population.

#### Distributive Education

Despite female enrollments of 45 percent in distributive education, no offering has a significant female percentage in terms of total enrollments. However, the following programs enroll a majority of girls, with percentages ranging from 51 percent to 69 percent: apparel and accessories, floristry, food services, general merchandise, home furnishings, and personal services. Of all the vocational-technical areas, distributive education shows the closest similarity between enrollment patterns for males and females.

In January 1973, the trade business was the second largest employer of women, with a total of 6,300,000 working mostly in retail. Women comprise nearly half (5,400,000) of the employees in the retail trade, but only one-fourth (900,000) in the higher paying wholesale trade. This

TABLE 10  
Enrollment in Agricultural Programs by Total Enrollment, by Program's Percent of Total,  
by Sex, by Percent Female, and by Female Percent of Total Enrollment in Agriculture\*

OE Instructional Title	Total	Program % of Total	Male	Female	Percent Female	Female % of Total in Agriculture
1. Agricultural Production	584,155	62.9	541,574	22,581	4.0	2.5
2. Agricultural Supplies/ Services	24,237	2.7	23,065	1,172	4.8	.1
3. Agricultural Mechanics	128,795	14.4	127,387	1,408	1.1	.1
4. Agricultural Products	9,439	1.1	8,703	736	7.8	--
5. Agricultural Ornamental Horticulture	56,329	6.3	41,172	15,157	26.9	1.9
6. Agricultural Resources	24,440	2.7	22,577	1,863	7.6	.2
7. Forestry	17,998	2.0	17,471	527	2.9	--
8. Other	71,070	7.9	66,351	4,719	6.6	.5
Total	896,463	100. %	848,300	48,163	--	5.4

\*Includes duplicated enrollments and enrollments below grade 9.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education  
Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and  
Welfare, May, 1973, p. 12.

TABLE 11

Enrollment in Distribution Programs by Total Enrollments, by Program Percent of Total, by Sex, by Percent Female, and by Female Percent of Total in Distribution\*

OE Instructional Title	Total	Program of Total	Male	Female	Percent Female	Female % Total in Distribution
1. Advertising Services	17,535	2.7	9,602	7,933	45.2	1.2
2. Apparel & Accessories	24,798	3.9	8,195	16,603	66.9	2.6
3. Automobiles	9,840	1.5	8,249	1,591	14.4	.2
4. Finance & Credit	27,996	4.4	16,168	11,828	42.2	1.8
5. Floristry	5,231	.8	1,615	3,616	69.1	.6
6. Food Distribution	29,091	4.5	18,162	10,899	37.5	1.7
7. Food Services	34,149	5.3	13,010	21,139	61.9	3.3
8. General Merchandise	204,681	32.0	100,039	104,642	51.1	16.3
9. Hdwe., Bldg. Mts., etc.	5,725	.9	4,449	1,276	22.3	.2
10. Home furnishings	5,874	.9	2,358	3,516	59.8	.5
11. Hotel & Lodgings	12,697	2.0	7,479	5,218	41.1	.8
12. Industrial Marketing	8,627	1.3	6,126	2,501	29.0	.4
13. Insurance	13,132	2.0	9,581	3,551	27.0	.5
14. International Trade	702	.1	458	244	34.7	.0
15. Personal Services	17,836	2.8	8,675	9,161	51.4	1.4
16. Petroleum	4,280	.7	4,080	200	4.0	.0
17. Real Estate	82,111	12.8	55,946	26,165	32.0	4.0
18. Recreation & Tourism	12,782	2.0	6,674	6,108	47.8	.9
19. Transportation	12,447	2.0	8,250	4,197	33.7	.0
20. Other	111,119	17.3	61,219	49,900	44.9	7.8
Total	640,423	99.8**	350,395	290,028	--	45.3

\*Includes duplicated enrollments and enrollments below grade 9.

\*\*May not equal 100 due to rounding.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, pp. 12-13.

results in an income differential of 60 percent; more annual income for men in the field. General merchandising paid average weekly earnings of only \$82 per week in January 1973. Women made up two-thirds of the sales-people in department stores, clothing and accessory shops, and drugstores.

The percentage of women in real estate increased from nine percent in 1940 to 36 percent in 1973. Banking, insurance, and credit agencies are expected to expand and should provide new opportunities for women.<sup>4</sup> However, new job openings in retail are expected to be half of what they were in the 1960s, because of automation, self-service stores, and vending machines. Thus, distribution, with enrollments of 290,000 females, should not be viewed as an occupational area which can absorb increasing numbers of women.<sup>5</sup>

#### Health

Young women comprise 85 percent of total enrollments in health occupations. In only two of 17 programs are they less than a majority. Forty-one percent of students enrolled in dental laboratory technician courses are female and 33 percent in environmental health are female. Within the 17 occupational categories, three programs account for 56 percent of the female enrollments; practical nurse (23 percent), nurse associate degree (17 percent), and nurse's aide (16 percent).

Health care services greatly expanded during the 1960s attributed to population growth, rising affluence, and additional people who could afford improved services, plus an increase in health insurance programs and special public programs like Medicare and Medicaid. In January 1973, about 1,600,000 women were employed in hospitals, where earnings averaged \$108 weekly.<sup>6</sup> It appears that health services will continue to expand and provide employment opportunities for increasing numbers of women--and men.<sup>6</sup>

#### Consumer and Homemaking

Consumer and homemaking is 92 percent female, with no individual course enrolling fewer than 73 percent females (family relations). Yet,

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<sup>4</sup> Elizabeth Waldman and Beverly J. McEaddy, "Where Women Work--an Analysis by Industry and Occupation," Monthly Labor Review, May, 1974, pp. 4-9.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid., pp. 4-5 and 10.

<u>Skilled Trade</u>	<u>Number of Women Employed, 1970</u>	<u>Women as Percent of Total</u>	
		<u>1960</u>	<u>1970</u>
Transportation, Communica- tions and other public utilities	5676	1.2	3.7
Brickmasons and Stonemasons	2049	.5	1.3
Bulldozer Operators	1151	—	1.3
Cabinetmakers	3429	1.3	5.1
Carpenters	11059	.4	1.3
Crane Derrick and Hoist Operators	1952	.5	1.3
Electricians	8646	.7	1.8
Excavating, Grading, Road Machine Operators-except Bulldozers	2513	.4	1.1
Furniture and Wood Finishers	3600	3.5	16.9
Inspectors, Scalars, Graders			
Log and Lumber	1877	3.9	11.0
Job and Die Setters, Metal	2221	.6	2.6
Mechanics and Repairers	49349	.9	2.0
Air Conditioning, Heating and Refrigeration	1865	.2	.9
Aircraft	4013	1.5	2.9
Automobile Body Repairers	1332	—	1.2
Automobile Mechanics	11730	.4	1.4
Household Appliance and Accessory Insulators and Mechanics	2550	—	2.1
Radio and Television	5032	1.7	3.7
Molders, Metal	5757	2.9	10.6
Painters, Construction and Maintenance	13386	1.9	4.1
Pattern and Model Makers except paper	1858	1.6	4.8
Plumbers and Pipefitters	4110	.3	1.1
Shoe Repairers	6359	6.7	20.3
Stationary Engineers	2472	.5	1.4
Tool and Die Makers	4197	.6	2.1

TABLE 13  
Enrollment in Consumer and Homemaking Programs by Total Enrollments, by Program  
Percent of Total, by Sex, by Percent Female, and by Female Percent  
of Total Enrollment in Consumer and Homemaking\*

OE Instructional Title	Total	Program Percent of Total	Male	Female	Percent Female	Female % of total in Home Economics
1. Child Development	138,589	4.5	5,565	133,024	96.0	4.2
2. Clothing and Textiles	364,659	11.5	7,163	357,496	98.0	11.3
3. Consumer Education	102,055	3.2	20,502	81,553	79.9	2.6
4. Family Relations	190,397	6.0	49,785	140,612	73.8	4.4
5. Food & Nutrition	222,552	7	30,747	191,805	86.2	6.0
6. Home Management	55,897	1.7	3,999	51,898	92.8	1.6
7. Housing & Home Furn.	105,296	3.3	7,160	98,136	93.2	3.0
8. Other	1,993,980	62.9	125,693	1,868,287	93.7	59.0
Total	3,173,425	100.1**	250,614	2,922,811	92.1	---

\*Includes duplicated enrollments and enrollments below grade 9.

\*\*May not equal 100 due to rounding.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education  
Fiscal Year 1972, Washington: Office of Education, Department of Health, Education and  
Welfare, May, 1973, p. 14.

59 percent of the female enrollments are in consumer and homemaking programs at the elementary and junior high school level. Young women in consumer education account for only 2.6 percent of the total. Child development enrolls only four percent and food and nutrition only six percent of the female enrollments.

#### Gainful Home Economics

While gainful home economics comprises the smallest total enrollment in Vocational Education, it is overwhelmingly female, with enrollment percentages ranging from 75 percent (food management, production, and services) to 95 percent (clothing management, production, and services). In contrast with consumer and homemaking, child care and guidance (25 percent), clothing management, production, and services (20 percent), and food management production and services (21 percent) account for 66 percent of the total enrollments in gainful home economics.

Although these programs provide wage-earning skills, job opportunities in related occupations are mixed. The 6,000,000 women working in hotels and laundries or dry-cleaners earned average wages between \$76 and \$87 weekly in January 1973. Yet, in food products, the average worker in the malt liquor industry, where seven percent of the employees were women, earned \$229 a week.

#### Office Occupations

The only office occupation in which females are less than a majority is in business data processing systems, which enrolls 51 percent males, and supervisory and administrative management, which is 72 percent male. Stenography, secretarial, and related programs are 95 percent female. The largest female concentrations are in stenography-secretarial (22 percent), typing (21 percent), and filing and office machines (14 percent). It is ironic that within a traditional female program area young women enroll in supportive rather than in management occupations.

The temporary help agencies currently employ an estimated 1,500,000 persons, who are sent out on assignment to fill temporary vacancies in clerical, industrial, or professional jobs. About 70 percent of the jobs are clerical, however, and most temporary clerical workers are women. Yet, the prospects for job expansion during the 1970s and 1980s are good. It.

<sup>6</sup> Ibid., pp. 4-5 and 10.

Ibid., pp. 10-11.

TABLE 14

Enrollment in Home Economics (Gainful) Programs by Total Enrollment, by Program Percent of Total, by Sex, by Percent Female, and by Female Percent of Total Enrollment in Home Economics (Gainful)\*

OE Instructional Title	Total	Program Percent of Total	Percent in Home Economics	
			Male	Female
1. Care & Guidance of Children	77,158	27.5	5,572	71,586
2. Clothing Mgt., Prod., Serv.	59,524	21.2	2,706	56,818
3. Food Mgt., Prod., Serv.	77,594	27.7	19,235	58,359
4. Home Furn. Equip., Serv.	21,278	7.6	2,580	18,698
5. Inst., & Home Mgt. & Sup.	8,061	2.9	868	7,193
6. Other	36,648	13.1	8,063	28,585
Total	280,263	100.0	39,024	241,239
				25.5
				20.3
				20.8
				6.7
				2.6
				10.2
				86.1

\*Includes duplicated enrollments and enrollments below grade 9.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, p. 14.

TABLE 19

Enrollment in Office Occupations by Total Enrollments by Program Percent of Total, by Sex,  
by Percent Female, and by Female Percent of Total Enrollment in Office Occupations

OE Instructional Title	Total	Program Percent of Total	Male	Female	Percent Female in Office	Female Percent of Total in Office
1. Accounting & Computing	351,861	15.0*	141,606	210,255	59.7	8.9
2. Bus. Data Process. Sys.	156,748	6.6	79,985	96,763	49.0	3.3
3. Filing & Office machines	398,226	16.9	70,772	327,454	82.2	13.9
4. Info. Communic. Occup.	23,826	1.0	6,595	17,241	72.4	7.7
5. Mils Support, Trans, etc.	10,288	.4	4,964	5,324	51.7	.2
6. Personnel, Trg. & Related	13,693	.6	5,022	8,671	63.3	.4
7. Steno, Secy & Related	550,686	23.4	21,823	528,863	96.0	22.5
8. Supervisory & Admin. Mgt.	77,730	3.3	56,249	21,481	27.6	9.9
9. Typing & Related	628,414	26.7	127,897	500,517	79.6	21.3
10. Other	141,300	6.0	40,664	100,636	71.2	4.3
Total	2,352,772	99.9**	555,567	3,797,205	--	76.4

\*Includes duplicated enrollments and enrollments below grade 9.

\*\*May not equal 100 due to rounding.

Source: Division of Vocational and Technical Education, Summary Data, Vocational Education, Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, pp. 14-15.

is expected that the supply of clerical workers will increase as the participation rate for women in the labor force rises.<sup>8</sup>

A major employer of women is government, which employs 22 percent of all women on non-farm payrolls. According to a 1970 survey by the U.S. Civil Service Commission, of women employed by the Federal government most worked in administrative, clerical, and office service jobs. Approximately 77 percent were in grades GS 1-6. (GS 1-4 are non-professional entry level clerical and support positions and GS-5 is entry level for professional employment.) Thirty-eight percent of women employed by the Federal government were clerical workers, who received average annual salaries of \$4,952.75 in 1970.<sup>9</sup> Federal, State, and local governments are likely to continue to be major employers of large numbers of female clericals.

#### Technical Education

Women are less than ten percent of total enrollments in technical education. Of the 22 instructional titles, only scientific data technology, a relatively new field, has a sizeable number of females, 32 percent of the program enrollment.

There is no reason other than custom to prevent women from enrolling in technical programs. None has weight or strength restrictions. However, at least 17 of the occupations require mathematics and/or science as prerequisites, courses in which fewer young women enroll in secondary schools. Average annual income for entry level positions in 13 technical occupations approaches \$8,164.69 (see Table 16). Thus, the technical field is a promising area of employment affording higher than average earnings for women. In view of our expanding technological society, technical skills will be in even greater demand in the future.

#### Trade and Industrial Education

Females account for only 12 percent of the total enrollment in trade and industrial, although their overall rate of increase has doubled that of men since 1966. Of the 45 programs, only five have female majorities. Cosmetology is 94 percent female; textile production and fabrics is 82 percent female; other personal services is 80 percent female; fabric maintenance services is some 53 percent female; and commercial art occupations is 51 percent female. Yet, women are beginning to enter

<sup>8</sup> Martin J. Gannon, "A profile of the Temporary Help Industry and Its Workers," Monthly Labor Review, May, 1974, pp. 44-45.

<sup>9</sup> Waldman and McEaddy, op. cit., pp. 9-10.

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#### Technical Education

Women are less than ten percent of total enrollments in technical education. Of the 22 instructional titles, only scientific data technology, a relatively new field, has a sizeable number of females, 32 percent of the program enrollment.

There is no reason other than custom to prevent women from enrolling in technical programs. None has weight or strength restrictions. However, at least 17 of the occupations require mathematics and/or science as prerequisites, courses in which fewer young women enroll in secondary schools. Average annual income for entry level positions in 13 technical occupations approaches \$8,164.69 (see Table 16). Thus, the technical field is a promising area of employment affording higher than average earnings for women. In view of our expanding technological society, technical skills will be in even greater demand in the future.

#### Trade and Industrial Education

Females account for only 12 percent of the total enrollment in trade and industrial, although their overall rate of increase has doubled that of men since 1966. Of the 45 programs, only five have female majorities. Cosmetology is 94 percent female; textile production and fabrics is 82 percent female; other personal services is 80 percent female; fabric maintenance services is some 53 percent female; and commercial art occupations is 51 percent female. Yet, women are beginning to enter

Martin J. Cannon, "A profile of the Temporary Help Industry and Its Workers," Monthly Labor Review, May, 1974, pp. 44-45.

Waldman and McCaddy, *op. cit.*, pp. 9-10.

TABLE 16  
Enrollments in Technical Programs by Total Enrollment, by Program Percent  
of Total, by Sex, by Percent Female, and by Female Percent of  
Total Enrollment in Technical (Occupations)\*

OE Instructional Title	Total	Program Percent of Total	Male	Female	Percent Female	Female Percent Total	Technical
1. Aeronautical Technology	5,888	1.7	5,062	826	14.0	.2	
2. Architectural Technology	14,144	4.2	12,993	1,151	8.1	.3	
3. Automotive Technology	7,453	2.2	7,393	60	.8	--	
4. Chemical Technology	5,355	1.6	4,273	1,082	20.2	.3	
5. Civil Technology	20,113	6.0	19,314	799	4.0	.2	
6. Electrical Technology	15,742	4.7	15,520	222	1.4	.1	
7. Electronics Technology	64,440	19.1	63,090	1,350	2.1	--	
8. Electromechanical Tech.	4,463	1.3	4,387	76	1.7	--	
9. Environ. Control Tech.	4,634	1.4	4,424	210	4.5	.1	
10. Industrial Technology	11,706	3.5	10,563	1,143	9.8	.3	
11. Instrumentation Tech.	3,084	.9	3,003	81	2.6	.1	
12. Mechanical Technology	26,395	7.8	25,490	905	3.4	.3	
13. Metallurgical Technology	1,742	.5	1,718	24	1.3	--	
14. Scientific Data Technology	16,948	5.0	11,551	5,397	31.9	1.6	
15. Commercial Pilot Training	5,884	1.7	5,495	389	6.6	.1	
16. Fire & Safety Technology	8,826	2.6	8,748	78	.9	--	
17. Forestry Technology	2,504	.7	2,416	88	3.5	.1	
18. Oceanographic Technology	1,872	.5	1,712	160	8.5	.1	
19. Police Science Technology	43,863	13.0	39,683	4,180	9.5	1.2	
20. Air Pollution Technology	1,173	.3	1,106	67	5.7	--	
21. Water & Waste Water Tech.	1,418	.4	1,230	188	13.2	.1	
22. Other	69,493	20.6	54,962	14,531	20.9	4.3	
Total	337,140	99.7**	304,133	33,007	--	9.8	

\*Includes duplicated enrollments and enrollments below grade 9.

\*\*May not equal 100 due to rounding.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education  
Fiscal Year 1972, Washington: Office of Education, Department of Health, Education and  
Welfare, May, 1973, p. 15.

TABLE 17

Enrollments in Trade and Industrial Programs by Total Enrollments, by Program Percent of Total, by Sex, by Percent Female, and by Female Percent of Total in Trade and Industrial (Occupations)\*

OE Instructional Title	Total	Program Percent of Total	Male	Female	Percent Female	Percent of Total in Trade & Ind.
1. Air Conditioning	67,620	2.8	64,956	2,664	4.0	.1
2. Appliance Repair	17,472	.7	16,965	507	3.0	--
3. Body & Fender, Auto	57,284	2.4	56,202	1,082	.9	--
4. Mechanics, Auto	228,364	9.5	223,065	5,299	2.3	.2
5. Other Automotive	39,522	1.7	37,882	1,640	4.1	.1
6. Aviation Occup.	31,780	1.3	29,593	2,187	6.9	.1
7. Blueprint Reading	12,842	.5	12,199	643	5.0	--
8. Business Machine Maint.	3,326	.1	3,180	146	4.4	--
9. Commercial Art Occup.	31,445	1.3	15,679	15,766	50.1	.6
10. Commercial Fishery Occup.	3,203	.1	2,498	705	22.0	--
11. Commercial Photog. Occup.	14,612	.6	10,856	3,756	25.7	.1
12. Carpentry	95,706	4.0	94,255	1,451	1.5	.1
13. Electricity	60,791	2.6	60,202	589	1.0	--
14. Masonry	29,992	1.3	29,756	236	.8	--
15. Plumbing & Pipe Fitting	37,311	1.6	37,327	34	2.0	.1
16. Other Constr. & Maint.	79,623	3.3	78,057	1,566	2.0	.1
17. Custodial Services	16,267	.7	13,720	2,547	15.7	.1
18. Diesel Mechanic	13,611	.6	13,426	185	1.4	.3
19. Drafting Occup.	126,750	5.3	119,658	6,892	5.4	.3
20. Electrical Occup.	81,493	3.4	80,584	909	1.1	.2
21. Electronic Occup.	97,936	4.1	93,524	4,412	4.5	.1
22. Fabric Maint. Services	5,939	.2	2,797	3,142	52.9	.1
23. Foremanship, Super., & Hgt. Buval.	120,826	5.0	98,258	22,562	18.7	.9
24. Graphic Arts Occup.	68,562	2.9	60,272	8,290	12.1	.3
25. Industrial Atomic Energy	157	.0	120	37	23.6	--
26. Instr. Maint. & Repair	3,045	.1	2,938	107	3.5	--
27. Maritime Occup.	6,755	.3	6,553	202	3.0	.1
28. Metalworking Occup.	291,662	12.2	288,581	3,081	1.0	.1
29. Metallurgy Occup.	5,160	.2	5,117	43	.8	--
30. Barbering	3,374	.2	3,413	661	16.6	--
31. Cosmetology	48,810	2.0	2,940	45,870	94.0	1.9

TABLE 17--Continued

OE Instructional Title	Total	Program		Percent of Total		Female		Percent of Total in Trade & Ind.
		Male	Female	Male	Female	Male	Female	
32. Other Personal Services	13,356	2,717	10,639	79.7	79.7	10,639	79.7	4
33. Plastics Occup.	5,116	2,063	3,053	22.5	22.5	3,053	22.5	1.1
34. Fireman, Training	159,307	155,386	3,921	2.1	2.1	3,921	2.1	2
35. Law-Enforcement Trg.	74,801	68,858	5,943	7.9	7.9	5,943	7.9	3.8
36. Other Public Services	58,571	36,088	22,483	37.6	37.6	22,483	37.6	1.1
37. Quantity Food Occup.	37,459	23,365	14,094	37.6	37.6	14,094	37.6	1.1
38. Refrigeration	11,198	10,384	814	7.3	7.3	814	7.3	1.1
39. Small Engine Repair	26,045	25,440	605	2.3	2.3	605	2.3	1.1
40. Sta. Energy Sources Occup.	27,502	7,228	20,274	32.7	32.7	20,274	32.7	1.8
41. Textile Prod. & Fabr	51,238	9,028	42,210	17.2	17.2	42,210	17.2	3
42. Leather Working	2,756	2,283	473	17.2	17.2	473	17.2	1.1
43. Upholstering	16,549	8,944	7,605	46.0	46.0	7,605	46.0	1.1
44. Woodworking	84,709	79,336	5,373	6.3	6.3	5,373	6.3	1.1
45. Other	146,421	119,110	27,311	18.7	18.7	27,311	18.7	1.1
Total	2,396,862	2,117,352	279,510	100.0	100.0	279,510	100.0	11.7

\*Includes duplicated enrollments and enrollments below grade 9.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education Fiscal Year 1972. Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, pp. 16 and 17.

nontraditional occupational programs. In 1973, over 500 women were enrolled in air conditioning, appliance repair, auto body and fender repair, auto mechanics, aviation occupations, carpentry, electricity construction and maintenance, electrical occupations, electronic occupations, metalworking occupations, small engine repair, and woodworking.<sup>10</sup>

Manufacturing employed 1,100,000 workers, mostly men, in January 1973. Unfortunately, there has been little change in the employment of women in manufacturing, where 90 percent are working either as semi-skilled operatives or in white-collar clerical jobs. Nearly three-fifths of women work in non-durable goods as assemblers, checkers, examiners and inspectors, sewers and stitchers. Large proportions of women are employed in textile mills, apparel and related items, and food and related items. However, increased automation has curtailed job expansion.<sup>11</sup>

Some 30 skilled trades (listed on page 43) employed at least 1,000 workers and at least doubled the number of women in the decade between 1960 and 1970.<sup>12</sup>

In 1972, 5,500,000 women were 28 percent of the total employees in the skilled trades, but most were concentrated in less skilled, lower paying jobs. In January 1973, their average weekly earnings were less than \$100. The apparel industry, in which 81 percent of the employees were women, paid average weekly salaries of only \$93, whereas the average salary for all manufacturing workers was \$159 a week.<sup>13</sup>

Skilled jobs in manufacturing, construction, and industry offer economic advantages from which few women to date have benefitted. Apprenticeship programs provide job entrants with two to four years of on-the-job training and classroom instruction together with paid employment. Apprentices also receive regular pay increases, paid vacations, holidays, sick leave, and workmen's compensation.

The skilled trades would afford qualified women the opportunity to break out of the confinement of female-intensive occupations for more

<sup>10</sup> Janice Neipert Hedges and Stephen E. Bemis, "Sex Stereotyping: Its Decline in Skilled Trades," Monthly Labor Review, May, 1974, pp. 16 and 20.

<sup>11</sup> Waldman and McEaddy, op. cit., pp. 5-8 and 12.

<sup>12</sup> Hedges and Bemis, op. cit., 16.

<sup>13</sup> Ibid., p. 18.

TABLE 12

Enrollment in Health Programs by Total Enrollments, by Program Percent of Total, by Sex, by Percent Female, and by Female Percent of Total Enrollment in Health\*

OE Instructional Title	Total	Program % of Total		Female % of total in Health	
		Male	Female	Male	Female
1. Dental Assistant	15,466	1,060	14,406	93.1	4.3
2. Dental Hygienists	4,754	170	4,584	96.4	1.4
3. Dental Lab. Technician	2,948	1,727	1,221	41.4	.4
4. Medical Lab. Assistant	10,524	2,348	8,176	77.7	2.4
5. Other Medical Lab. Tech.	3,156	480	2,676	84.8	.8
6. Nurse Associate Degree	54,931	6,457	58,474	90.	17.3
7. Practical (Voc) Nurse	82,896	4,594	78,302	94.4	23.2
8. Nurses' Assistants (Aide)	58,903	5,595	53,308	90.5	15.8
9. Occupational Therapy	1,504	294	1,210	80.4	.3
10. Physical Therapy	1,501	444	1,057	70.4	.3
11. Radiologic Technology	5,766	2,223	3,543	61.4	1.0
12. Environmental Health	1,401	837	464	33.1	.1
13. Mental Health Technology	3,898	1,018	2,880	73.9	.8
14. Inhalation Therapy Tech.	5,759	2,553	3,206	55.7	.9
15. Medical Assistant	10,326	3.0	787	9,539	92.4
16. Health Aide	8,438	2.5	1,888	6,550	77.6
17. Other	54,724	16.2	19,079	35,645	65.1
Total	336,895	99.6**	285,241	--	84.7

\*Includes duplicated enrollments and enrollments below grade 9.

\*\*May not equal 100 due to rounding.

Source: Division of Vocational and Technical Education, Summary Data Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, p. 13.

satisfying kinds of work. In contrast to the controlled environment of many factory jobs and clerical jobs in manufacturing, the skilled trades offer more independence and freedom, including freedom to move about on the job, and a chance to develop individual ways of working. For women who like to work with their hands, many of these jobs should provide the opportunity for the production of a finished product, a self-fulfilling achievement for the tradesperson.<sup>14</sup>

Unfortunately, women have been discouraged from entering apprenticeship programs and jobs in industry. Physical requirements that are often higher than the job actually demands prevent women from being hired. Such artificial barriers to employment against women and minorities are prohibited by both the Office of Federal Contract Compliance under Executive Order 11375 and the Equal Employment Opportunity Commission. The U.S. Department of Labor has established levels of strength required in many occupations. Yet, not enough research has been completed on the ability of the average woman or man to meet these requirements. In many trades, the physical demands are no higher than for housework; in others, the requirements are within the limitations of some women and beyond the capability of some men. The continuing development of labor-saving equipment probably will reduce many of the requirements now in effect.<sup>15</sup>

Manufacturing will offer opportunities to additional workers during the 1970s, particularly in industries producing durable goods such as machinery, rubber and plastic products, and instruments. These have been male-dominated industries. However, the number of women in fabricated metal products, non-electrical machinery, electrical equipment and supplies, transportation equipment, instruments and related products, and miscellaneous manufacturing has increased slightly in the past ten years. For women with minimal educational attainment, manufacturing may offer many semi-skilled jobs.<sup>16</sup> For women with a high school diploma or the equivalent, the skilled trades should provide improved job opportunities once sex-stereotyping in employment decreases. In light of current projections of the growth rate and the extent of job replacement in manufacturing and industry, some 400,000 jobs a year will be available between now and 1985. Women who are trained and qualified should be in a good position to receive an equal share of the employment opportunities available in trades and industry.<sup>17</sup>

<sup>14</sup> Ibid., p. 19.

<sup>15</sup> Ibid.

<sup>16</sup> Waldman and McEaddy, op. cit., pp. 5-6 and 12.

<sup>17</sup> Hedges and Bemis, op. cit., pp. 19 and 21.

### Implications of Vocational-Technical Education Enrollments

Of the 136 Office of Education instructional titles, girls comprise a majority of enrollments in only 48 occupational areas. Of the eight vocational-technical programs, girls are concentrated in four--health, consumer and homemaking, gainful home economics, and office. Only 41 of the Office of Education instructional titles are offered within these four programs. Since eight of the titles are non-wage-earning, girls who enroll in female-intensive vocational programs are limited to 33 wage-earning course options. By contrast, boys who enroll in vocational programs traditionally viewed as male-intensive have 95 options. The bar graph in Figure 1 illustrates the limited program options available to young women in Vocational-Technical Education.

Thus, boys have three times the options within male-intensive programs as girls have in female-intensive programs. However, within these programs the majority of females are concentrated in 29 instructional courses while boys are concentrated in 84.

Of the 8,436,412 total enrollments in wage-earning programs in 1972, females accounted for 42 percent. In non-wage-earning consumer and homemaking, the largest secondary vocational program, specialized courses like child development, consumer education, and food and nutrition enrolled only 406,382, or six percent, of the females and 56,814, or one percent, of the males in 1972.

Limited educational options for girls, whether by subtle societal conditioning or overt discriminatory educational practices, lead to fewer opportunities for women in the world of work. According to 1970 Bureau of Census tabulations, 50 percent of employed women are concentrated in 21 occupations while 50 percent of employed males are spread throughout 65 of the occupations listed in 1969.

### Teachers and Enrollments

Not only are girls clustered in a much narrower range of vocational-technical courses than boys, as a group girls may have less opportunity for instruction from teachers, because the vocational areas in which girls are in the majority have a higher teacher/student ratio than the areas in which boys predominate.

As Table 18 suggests, the 4,515,896 male enrollments in 1972 were in programs which had an average of 40.6 students per teacher, whereas the 5,890,252 females were likely to be enrolled in programs with an average of 55.2 students per teacher.<sup>18</sup> The range is from 20 students per teacher in technical programs to 91 per teacher in consumer and homemaking, with an average of 48 students per teacher in Vocational Education in 1972.

<sup>18</sup> "Summary Data Fiscal Year 1972," op. cit., p. 2.

FIGURE 1

Wage-Earning Vocational-Technical Programs, 1972

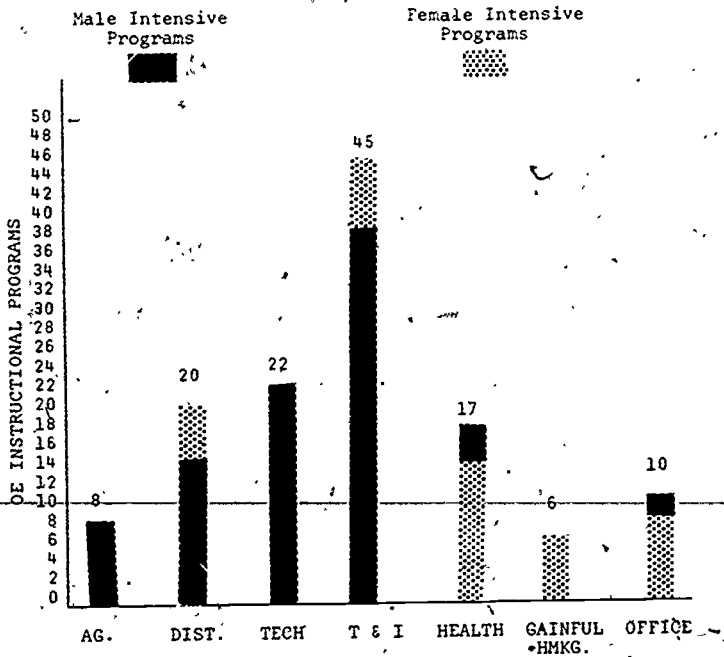


TABLE 18

Vocational Education Programs Percentage Distribution of Enrollment by Sex,  
by Total Number of Teachers, by Average Teachers per Student,  
and by Teachers' per-Male and Female Enrollments in 1972\*

Occupational Areas	Percent Male**	Percent Female**	Total Teachers***	Average Students per Teacher***	Total Teachers per male enroll- ments*	Total Teachers per female enroll- ments*
Agriculture	94.6	5.4	13,270	49.2	12,553.4	716.6
Distribution	54.7	45.3	13,795	67.5	7,545.9	6,249.1
Health	15.3	84.7	14,552	23.1	2,226.4	12,325.5
Consumer & Homemaking	7.9	92.1	34,820	90.9	2,751.0	32,069.0
Home Economics - Gainful	13.9	86.1	6,727	82.9	935.0	5,792.0
Office	23.6	76.4	52,662	44.6	12,428.3	40,233.7
Technical	90.2	9.8	16,820	20.0	15,171.6	1,648.4
Trades & Industry	88.3	12.2	65,105	36.8	57,487.7	7,617.3
Total	AV 44.6	AV 55.4	217,751	AV 47.8	111,099.4	106,651.6

\*Includes unduplicated enrollments and enrollments below grade 9.

Source: \*\*Division of Vocational and Technical Education, Trends in Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 7.

\*\*\*Division of Vocational and Technical Education, Summary Data Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, p. 3.

Although these are gross estimates, it is possible that girls receive less individualized instruction in traditional programs.

#### EXPENDITURES IN VOCATIONAL EDUCATION

Table 19 summarizes expenditures, Federal expenditures, per student costs, and percentage of total enrollments at the secondary, post-secondary, and adult levels. Post-secondary education has the highest per student cost. The thirteen percent of total vocational enrollments in post-secondary education, which has the lowest percentage of females, has the highest per student expenditures. Female students are receiving the short end of the dollar.

Unfortunately, total expenditures for Vocational Education are not maintained separately for each program by all States, but in those seven States for which such data are available, males receive a greater percentage of total expenditures than females, as illustrated in Table 20. The seven States which are included in these data are Idaho, Mississippi, Nebraska, North Dakota, Oklahoma, South Dakota, and Virginia.

Whereas female students averaged almost 52 percent of the total average enrollments in the seven States which supplied the information, expenditures for their education were 37 percent of the total expenditure. Males, who comprised 48 percent of the enrollments, received 63.4 percent of the dollars. It should be noted, however, that this pattern of expenditures indicates a trend rather than evidence that expenditures for males are in fact higher than for females throughout the 50 States.

Limited spending not only restricts the educational opportunities for young women, but also reflects flagrant disregard of Title IX of the 1972 Education Amendments, which states:

No person . . . shall, on the basis of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.

Ninety-seven of the OE instructional titles have at least 75 percent of one sex or the other. Almost half had enrollments that were 90 percent one sex or the other. Thus, the enrollment patterns of Vocational Education programs in 1972 reflect serious segregation of females and males in direct violation of the law. This problem is further complicated by discrepancies which may exist between expenditures for male and female students. Although data are not available, it may be safe to conclude that since boys are enrolled in courses that are more costly to operate, they are receiving an added advantage.

TABLE 19

Comparison of Total, Federal Expenditures, Percentage of Expenditure, Per Student Costs, and Enrollments for the Three Levels of Vocational Education, 1972\*

Level	Total Expenditure	Federal Expenditure	Federal % of Total	Per Student Cost	Total Voc. Ed. Expense	Total Voc. Ed. Enrollment
Secondary	\$1,744,002,000	\$284,184,000	37	\$310.47	65.7	56.3
Post-Secondary	701,236,000	122,311,000	74	538.15	26.4	13.1
Adult	197,602,000	43,966,000	90.5	64.49	7.4	30.7

\*Does not include Below Grade 9.

Source: Arthur M. Lee and Robert Sartin, Learning A Living Across the Nation, Project Baseline, Second National Report, Vol. 2, Flagstaff: Northern Arizona University, November, 1973, p. 118.

TABLE 20  
Total Federal, State, and Local Vocational Education Expenditures for Seven States  
by Occupational Areas for Females by Percent of Female Enrollments for 1972\*

Occupational Areas	Total Enrollment	Female Enrollment	Percent Female	Total expenditure	Percent of total expenditure	Per Student Cost	Total Female Expenditures Based on per Unit
Agriculture	90,076***	1,823***	1.9***	\$14,312,748**	16.9**	\$145.93**	226,030.39**
Distributive Education	75,486	35,728	47.3	6,586,309	7.8	87.25	3,117,268.00
Health Occupations	20,031	16,714	83.4	2,938,371	3.5	146.69	2,451,776.66
Consumer Ed. & Homemaking	229,858	215,948	93.9	15,265,639	18.0	66.41	14,341,106.68
Occupational Office	8,900	7,951	89.3	580,492	0.7	65.22	518,564.22
Technical Occupations	100,704	82,072	81.5	9,201,599	10.8	91.37	7,498,918.64
Education	20,131	916	4.5	3,350,791	3.9	166.74	152,459.04
Trade & Industrial Education	170,049	13,956	8.2	32,535,424	38.4	191.32	2,670,061.92
Total	723,235	375,108	51.9	\$84,771,367	100.1	960.63	\$31,016,185.55

\*Includes unduplicated enrollments and enrollments below grade 9.

Source: \*\*Arthur M. Lee and Robert Sartin, Learning a Living Across the Nation, Project Baseline, Second National Report, Vol. 2, Flagstaff: Northern Arizona University, November, 1973, pp. 128-129.

\*\*\*Division of Vocational and Technical Education, Vocational and Technical Education Selected Statistical Tables Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, June, 1973, pp. 31-41.

### CONSUMER AND HOMEMAKING AND GAINFUL HOME ECONOMICS

When the Smith-Hughes Act was passed in 1917 to provide funds to support Vocational Education, the primary "vocational" area for girls was homemaking, because only 20.4 percent were working outside the home at that time. Despite the major increase in the numbers of working women, fifty-five years after the passage of the Smith-Hughes Act, 33.6 percent of all secondary Vocational Education students in grades 9-12 were enrolled in a homemaking program.<sup>19</sup> Yet, in terms of total enrollments at secondary (grades 9-12), post-secondary, and adult levels, there has been a significant reduction in the total percentage of students--both male and female--enrolled in homemaking. The highest percentage of enrollees in homemaking between 1961-1972 was in 1964, when 44.3 percent of all Vocational Education students were enrolled. The 1972 total enrollment, including below grade 9, was 29.7 percent, of which 27.3 percent were in consumer and homemaking and 2.4 percent were in gainful home economics. Of the 6,422,115 females in total vocational programs in 1972, 49.2 percent were in home economics programs. Thus, homemaking, because of the large enrollment of females, must be scrutinized as to content and impact upon the world of work.

#### Homemaking and the World of Work

The question must be raised: How relevant is homemaking to the world of work? The answer is not a simple one. Only 2.4 percent of all enrollments in home economics were in gainful home economics in 1972. The remaining 27.3 percent of total Vocational Education students were enrolled in a program that does not lead to a wage-earning occupation, and there is some doubt as to whether it should be classified as "vocational." It should be noted that gainful home economics has shown a steady gain since 1970. This trend suggests an increased demand for the relatively new areas of occupational home economics. Unfortunately, potential earnings in related occupations are low.

A second issue which must be raised is the evidence of overt segregation by sex being practiced and perpetuated in schools which have enrollment patterns similar to the National average of 91.6 percent females in home economics. All Vocational Education areas have average enrollments that range from 76.4 percent (females in office occupations) to 94.6 percent (males in agriculture). The only acceptable level of enrollment by sex is in distribution. The rest are in flagrant violation of the law, and it can be anticipated that law suits will occur increasingly as citizens become aware that women in female-dominated Vocational Education programs, particularly homemaking, will have limited opportunities in the world of work unless they change their occupation to one in which males predominate. If present trends continue, projections show little likelihood of significant change in the percentage distribution of male and female enrollments in Vocational Education programs over the next five years, as may be seen in Table 21.

19

Trends in Vocational Education Fiscal Year 1972, op. cit., p. 6.

TABLE 21

Percentage Distribution of Enrollment in Vocational  
Education Areas by Sex 1977 - Projected\*

Program	1972 % Male	1977 % Male	1972 % Female	1977 % Female
Agriculture	94.6	92.0	5.4	8.0
Distribution	54.7	54.0	45.3	46.0
Health	15.3	17.0	84.7	83.0
Home Economics	8.4	10.0	91.6	90.0
Office	23.6	25.0	76.4	75.0
Technical	90.2	91.0	9.8	9.0
Trade and Industrial	88.3	87.0	11.7	13.0

\*Includes unduplicated enrollments and enrollments below grade 9.

Source: Division of Vocational and Technical Education,  
Trends in Vocational Education Fiscal Year 1972, Washington:  
Office of Education, Department of Health, Education, and  
Welfare, June, 1973, p. 7.

TABLE 2

Percentage Distribution of Enrollment in Vocational  
Education Areas by Sex 1977 - Projected\*

Program	1972 % Male	1977 % Male	1972 % Female	1977 % Female
Agriculture	94.6	92.0	5.4	8.0
Distribution	54.7	58.0	45.3	46.0
Health	15.3	17.0	84.7	83.0
Home Economics	8.4	10.0	91.6	90.0
Office	23.6	25.0	76.4	75.0
Technical	90.2	91.0	9.8	9.0
Trade and Industrial	88.3	87.0	11.7	13.0

\*Includes unduplicated enrollments, and enrollments below grade 9.

Source: Division of Vocational and Technical Education,  
Trends in Vocational Education Fiscal Year 1972, Washington:  
Office of Education, Department of Health, Education, and  
Welfare, June, 1973, p. 7.

Schools will feel the pressure from women's and civil rights groups increasingly as evidence of "cracking" of women and minorities in Vocational Education is documented further. Educators must develop strategies to integrate instructional courses within vocational-technical areas in order to distribute male and female enrollments more evenly. In addition, stronger impetus must be given to encouraging males to enroll in female programs and females to enroll in male programs in similar numbers, even though sex-stereotyping of occupations is not likely to be changed either quickly or easily.

Despite the fact that consumer and homemaking programs do not lead directly to gainful employment, skills developed in these areas are of such importance to human well-being to warrant special recognition. Homemaking increasingly must stress education for good health and human survival, and performance-based instruction should be offered as part of the required curriculum rather than as an elective. All students, both male and female, ought to demonstrate the following homemaking skills:

1. Nutrition
2. Household cleanliness and safety
3. Home maintenance and repair
4. Budgeting
5. Household management
6. Basic health care
7. Child care
8. Family relations

These skills are needed by young men and women alike. It no longer can be assumed that there always will be a woman in the house to perform domestic tasks. The rise of alternative life styles, "open" marriage, and single parent heads-of-households and the growing numbers of female workers suggest that men and women increasingly will share household responsibilities.

#### Consumer Education

The prevalence of overconsumption, debt, and bankruptcy amid the increasing financial complexity of American life warrant education in consumer economics. Whether it is taught in homemaking, economics, or mathematics courses is not a concern of this study. What is of concern is the evident need for knowledge and skills basic to economic survival in the complex free enterprise system of today. Consumer education ought to be a high school requirement including the following competencies:

1. Budgeting
2. Credit and installment buying
3. Savings, investments, and banking
4. Consumer shopping
5. Home ownership, rental, and automobile ownership
6. Insurance
7. Taxes

Homemaking and consumer education are fundamental to human and economic well-being in twentieth century America, and every academic and vocational student ought to demonstrate coping skills before being classified as a

graduate from public education. Current programs ought to be expanded as well as desegregated to meet the needs of young men and women. This might be done by merging skills now taught in industrial arts and home economics or integrating students in these classes in a more equitable manner.

In the near future, the concept of the home as a learning center is likely to be expanded to provide a direct source of information and instruction to children as well as adults who are homebound, but in need of training. "Television, audio cassettes, and correspondence courses along with a variety of other media make possible increasingly rich and sophisticated opportunities for study in the home at the convenience of the student."<sup>20</sup>

#### TECHNICAL EDUCATION AND TRADE AND INDUSTRIAL PROGRAMS

If equal opportunities are to be available to women in the world of work, equal educational opportunities must be made accessible to them both through improved counseling and integration of women into technical and trade and industrial programs. There are few occupational skill areas in which women do not demonstrate aptitude. In the following aptitudes, there are no discernible sex differences:

1. Analytical reading
2. Eyedness
3. Foresight
4. Inductive reasoning
5. Memory for design
6. Number memory
7. Objective personality
8. Subjective personality
9. Pitch Discrimination
10. Rhythm Memory
11. Timbre Discrimination
12. Total Memory
13. Tweezer-Dexterity

Women excel in the following aptitudes:

1. Finger Dexterity
2. Graphoria
3. Ideaphoria
4. Observation
5. Silograms
6. Abstract visualization

Men excel in grip and structural visualization.

20

Elizabeth J. Simpson, "Career Education-Feminine Version," Speech at the Regional Seminar Workshop on Women in the World of Work, Technical Education Research Centers, October, 1972, p. 11.

There is no discernible difference between men and women on English Vocabulary tests. Out of the 22 aptitude and knowledge areas measured, there are no sex differences in fourteen; women excel in six; and men excel in two.<sup>21</sup>

The U.S. Employment Service measures the aptitudes of job applicants, in relation to job requirements using the General Aptitude Test Battery (GATB), which assesses potential ability in nine areas. Of the seven areas related to the skilled trades, women excel in four, men excel in one, and two show no sex differences.<sup>22</sup>

#### Opportunities for Women in New Fields

Women are less likely to encounter job discrimination in new and emerging occupational fields. It has been estimated that there will be an additional 844,400 job openings in professional and technical occupations in the seventies, a growth of 39 percent over the previous decade. Despite increasing enrollments of technical students in post-secondary education, there will be a shortage of technical graduates in areas of critical social need: health and environmental control, cybernetics, information systems, and communications.

Newly emerging technologies, such as electro-mechanical technology, bio-medical equipment technology, laser and electro-optical technology, nuclear medical technology, noise control and abatement technology, offer promise for both men and women. This is particularly true since most emerging fields have not been stereotyped . . . (by sex).<sup>23</sup>

Despite manpower projections, there is little evidence of much change in male/female enrollment patterns in Vocational-Technical Education over the next five years. The repercussions of the energy crisis probably are being felt first and hardest among the most recently hired in the labor force—women and minorities. What effect the decreasing birthrate may have on the Gross National Product and the level of employment is unknown, but these trends suggest that the underutilization of women will continue to be a problem unless plans are implemented now to expand their opportunities in technical, trade and industrial, and apprenticeship programs leading to those higher paying occupations in which there is a growing demand for skilled workers, regardless of sex. Because women show the same skill aptitudes and abilities as men, they should be encouraged to train and enter nontraditional fields as well as non-stereotyped, emerging occupations affording a sound employment outlook.

<sup>21</sup>John J. Durkin, "The Potential of Women," Boston: Johnson O. Connor Research Foundation, Human Engineering Laboratory, 1971, pp. 1-2.

<sup>22</sup>Hedges and Bemis, *op. cit.*, p. 19.

<sup>23</sup>Mary L. Ellis, "Women in Technical Education," Speech at National Technical Education Clinic, Oklahoma City, March 26, 1971, pp. 9-10.

WOMEN IN POST-SECONDARY EDUCATION

Of the total enrollments in Vocational Education in 1972, 11 percent, or 1,304,092, were classified as "post-secondary" and 26 percent, or 3,066,404, were classified as "adult" students. While a single definition of these terms continues to be a problem, for purposes of this report the following definitions are offered. Post-secondary education in community colleges, technical institutes, and area vocational-technical schools provides programs requiring less than a bachelor's degree. Adult education for citizens beyond high school age offers basic education, high school equivalency, short-term courses, or training programs not requiring a diploma or degree. Adult and continuing education expands the educational system by linking public schools, post-secondary and higher education institutions, and other learning resources within the community in order to provide opportunities for lifelong learning to every resident.

Enrollments in Vocational-Technical Programs Beyond High School

Table 22 indicates the total graduates, number, and percentage of women in vocational-technical programs offered at post-secondary institutions granting associate degrees.

There are few surprises in the enrollment patterns of women in technical programs. Women were in the minority in two- and three-year programs in science and engineering. However, women were a majority in science and engineering programs requiring less than two years for completion. And they were 69 percent of the non-science and non-engineering programs requiring at least one year, but less than two years, for completion.

Less than 0.5 percent of females were enrolled in the science or engineering curriculum below the technical or semi-professional level in 1970-71. Yet, 46 percent were enrolled in short-term non-science and non-engineering programs below the technical level.

The segregation by sex in specific occupational curriculums both at the technical and semi-professional level is startling, as Table 23 (pages 58-61) indicates.

In data processing, women were the overwhelming majority of key punch operators, but none of them prepared to become data processing repairers.

The health services and paramedical field is dominated by women. However, of 19 specific occupations males comprised major enrollments in dental laboratory technology, mental health aide, institutional management, and physical therapy. Optical technology was 90 percent male. Physical requirements for skill and dexterity in these occupations in no way are related to sex. Rather, social custom and like-sexed role models are probable reasons for pronounced differences in male and female enrollments.

TABLE 22

Total Graduates from Associate Degree and Other Award Programs by Occupational Curriculum, by Sex, and Percent Female, 1970-71

Occupational Curriculum	Total	Women	Men	% Women
Science & Engineering	68,213	26,090	42,123	38.2
Less than 4; more than 2 yrs.				
Non-Science-Non Engineering	55,880	26,476	29,404	47.4
Less than 4; more than 2 yrs.				
Science or Engineering	19,515	10,756	8,759	55.1
Less than 2; at least 1 year				
Non-Science-Non Engineering	1,941	6,847	3,094	68.9
Less than 2; at least 1 year				
Science and Engineering	1,136	6	1,130	0.5
Less than 4 years - below technical level				
Non-Science-Non Engineering	321	90	231	28.0
Less than 4 years - below technical level				
Science and Engineering	1,492	321	1,171	21.5
Less than 2 years - below technical level				
Non-Science - Non Engineering	1,497	682	815	45.6
Less than 2 years - below technical level				

Source: Mary Evans Hooper, Associate Degrees and other Formal Awards Below the Baccalaureate, 1970-71, National Center for Educational Statistics, Office of Education, Department of Health, Education and Welfare, Washington: U.S. Government Printing Office, 1973, pp. 9-10.

TABLE 23

Science or Engineering Curriculum at Technical Level by Total Enrollment,  
Total Female, and Percent Female, 1970-71

Occupational Program	Total	Total Female	Percent Female
Data Processing Technologies			
Data Processing Technologies General	5,027	1,725	34.3
Key punch operator and other	648	567	87.5
Computer Programmer Technology	2,149	595	27.7
Computer Operator	387	199	51.4
Data Processing equipment maintenance	431	0	---
Other	103	27	26.2
Total	8,745	3,115	35.6

## Health and Paramedical Technology

Health Services Assistant Technologies	258	230	89.1
Dental Assistant Technologies	2,191	2,138	97.6
Dental hygiene technologies	2,506	2,489	99.3
Dental laboratory technologies	264	93	35.2
Medical or biological lab. asst. technologies	1,335	1,030	77.1
Animal laboratory assistant technologies	55	23	41.8
Radiologic technologies (X-ray, etc.)	1,139	782	68.6
Nursing, P.M. (less than 4-year program)	14,408	13,799	95.8
Nursing, practical (L.P.N. or L.V.N.-less than 4-year program)	7,708	7,496	97.2
Occupational therapy technologies	243	217	89.3
Surgical technologies	244	204	83.6
Optical technologies (include ocular care, ophthalmic, optometric technologies)	81	8	9.9
Medical record technologies	374	359	96.0
Medical assistant & medical office asst. tech.	1,256	1,176	93.6
Inhalation therapy technologies	570	270	47.4
Psychiatric technologies (include mental health aide programs)	1,189	429	36.1
Electro diagnostic technologies (include E.K.G., E.E.G., etc.)	22	17	77.3
Institutional management technologies (rest home, etc.)	276	91	33.0

TABLE 23 --Continued

Occupational Program	Total	Total Female*	Percent Female
Physical therapy technologies	467	196	42.0
Other, specify	815	560	68.7
Total	34,518	31,607	91.6
Mechanical and Engineering Technologies			
Mechanical & engineering technologies, general	2,560	22	.9
Aeronautical and aviation technologies	2,173	19	.9
Engineering graphics (tool and machine drafting and design)	2,917	60	2.0
Architectural drafting technologies	1,938	53	2.7
Chemical technologies (include plastics)	589	104	17.6
Automotive technologies	4,041	4	.1
Diesel technologies	721	9	1.2
Welding technologies	1,097	7	.6
Civil technologies (surveying photogrammetry, etc.)	1,637	12	.7
Electronics and machine technologies (television appliance, office machine repair, etc.)	7,851	25	.3
Electromechanical technologies	1,301	4	.3
Industrial technologies	1,657	20	1.2
Textile technologies	155	107	69.0
Instrumentation technologies	203	2	.1
Mechanical technologies	2,749	17	.6
Nuclear technologies	65	9	13.8
Construction & building technologies (carpentry, electrical work, plumbing, sheet metal, air conditioning, heating, etc.)	4,229	14	.3
Other, specify	1,554	34	2.2
Total	37,437	522	14.0

TABLE 23 --Continued

Occupational Program	Total	Total Female	Percent Female
Natural Science Technologies			
Natural science technologies, general	666	173	26.4
Agriculture technologies (include horticulture)	2,870	262	9.1
Forestry and wildlife technologies (include fisheries)	1,087	8	1
Food services technologies	693	231	33.3
Home economics technologies	872	797	91.4
Marine & oceanographic technologies	183	15	8.2
Laboratory technologies, general	174	60	41.7
Sanitation & public health inspection technologies (environmental health technologies)	145	15	10.3
Other, specify	378	41	10.8
Total	7,078	1,802	23.0
Business and Commerce Technologies			
Business & commerce technologies, general	11,008	3,017	27.4
Accounting technologies	5,301	1,710	32.2
Banking and finance technologies	5,572	56	20.0
Marketing, distribution, purchasing, business, and industrial management technologies	9,237	2,571	28.0
Secretarial technologies (include office machines training)	16,534	16,255	98.3
Personal service technologies (stewardess, cosmetologist, etc.)	1,262	1,184	93.8
Photography technologies	1,577	61	10.6
Communications and broadcasting technologies (radio/television, newspapers)	728	201	27.6
Printing and lithography technologies	512	725	4.9
Hotel & restaurant management technologies	916	222	24.2
Transportation & public utility technologies	324	86	26.5
Applied arts, graphic arts, & fine arts technologies (include advertising design)	2,998	1,843	54.8
Other, specify	1,368	549	40.1
Total	51,037	27,580	54.0

TABLE 23 --Continued

Occupational Program	Total	Total Female	Percent Female
Public Service Related Technologies			
Public service technologies, general	277	175	63.2
Bible study or religion-related occupations	744	404	54.3
Education technologies (teacher aide & 2-year teacher training programs)	3,856	3,267	84.7
Library assistant technologies	471	440	93.4
Police, law enforcement, corrections technologies	6,873	420	6.1
Recreation & social work-related technologies	1,146	620	54.1
Fire control technology & management	1,735	19	2.6
Public administration & management technologies	111	15	13.5
Other, specify	571	383	67.1
Total	14,784	5,743	38.8
Organized Occupational Curricula Below the Technical or Semiprofessional Level			
Science or engineering-related	2,628	327	12.4
Non-science and non-engineering related	1,818	772	42.5
Total	4,446	1,099	24.7

Source: Mary Evans Hooper, Associate Degrees and other Formal Awards Below the Baccalaureate, 1970-71, National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1973, pp. 320-326.

Of 17 programs in mechanical or engineering technology, women predominated in only one category--textile technology. The entire field was only 14 percent female.

In natural science technologies, women were 91 percent of the enrollments in home economics.

In business and commerce technology, secretarial as well as personal services (which includes cosmetologists and stewardesses) are overwhelmingly female by 98 and 94 percent.

In public service technologies, female enrollments are generally high. Only law enforcement and corrections, fire control, and administration and management technologies are predominantly male.

Of 75 technologies in post-secondary occupational education, women were the majority of enrollments in 27 occupations. As Figure 2 demonstrates, while men selected a technical occupation from twice the number of areas, women were clustered in occupations either related to health or business and commerce. Within the two female-intensive areas, women are a majority in 17 occupational programs. Men are a majority in 32 occupational programs within four male-intensive areas. Thus, the pattern of segregation in vocational-technical programs continues well beyond high school.

Unfortunately, enrollments of women in adult education programs are not available. Consequently, differences between male and female enrollment patterns in adult education are unknown.

#### MANPOWER TRAINING

The total enrollment in manpower training programs administered by the U.S. Department of Labor in 1972 was 346,066.<sup>24</sup> The following is a description of the various manpower programs designed for special target groups.

#### Manpower Development and Training Act Programs

The total 1972 enrollment in the five programs under the Manpower Development and Training Act was 209,269, of which 32 percent were females.<sup>25</sup> Enrollments within the five MDTA programs are not reported by sex.

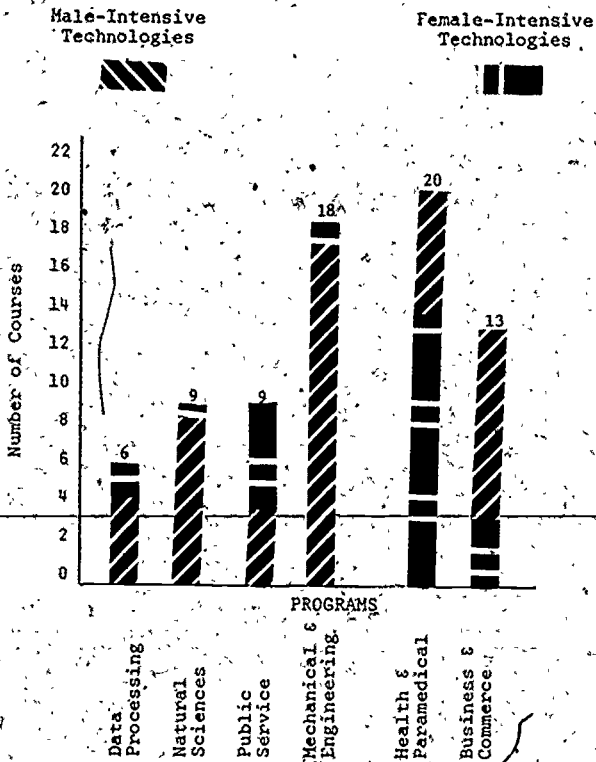
24

Arthur M. Lee and Robert Sartin, Learning A Living Across the Nation, Project Baseline, Second National Report, Vol. 2, Flagstaff: Northern Arizona University, November, 1973, p. 278.

25

Ibid., p. 300.

Figure 2  
Distribution of Technological Programs of Post-Secondary  
Education by Sex 1970-71



### Manpower Institutional Development Program

This program is operated by educational institutions for unemployed and underemployed people. The 1972 enrollment was 132,736.<sup>26</sup> According to two studies conducted to determine the effectiveness of this program, males exposed to institutional training had significant increases in earnings while females did not profit. Training had a greater impact on the earnings of those with less education; the program benefitted dropouts, especially grade school dropouts, more than high school graduates.<sup>27</sup> Those with long periods of unemployment prior to training experienced the largest increase in earnings and wages.<sup>28</sup>

### Manpower On-The-Job Training Program

On-the-job training provides skills and employment for unemployed or underemployed persons. Studies of this program reveal that women have had larger increases in earnings than men.<sup>29</sup> Some 6,560 trainees were enrolled in 1972.

### Manpower Part-Time Program

Training was provided in job-related skills for those already working, but underemployed. In 1972, 4,373 persons participated.

### Job-Opportunities in Business Optional Program

Public agencies employ disadvantaged persons in entry-level jobs and provide on-the-job training. A total of 51,152 enrolled in MDTA JOF Entry, JOF upgrade, which focuses on preparation for Civil Service positions, enrolled 4,448 in 1972.<sup>30</sup>

### Economic Opportunity Act Programs

The total enrollment in the six Economic Opportunity Act programs in 1972 was 136,797.

26.

Ibid., p. 300.

27

The Effectiveness of Manpower Training Programs: A Review of Research on the Impact on the Poor, A Staff Study for Subcommittee on Fiscal Policy, Joint Economic Committee, Congress of the United States, Paper No. 3, Washington: U.S. Government Printing Office, November 20, 1972, p. 11.

28

Ibid., p. 12.

29

Ibid., p. 11.

30

Lee and Sartin, op. cit., pp. 278-279.

### Work Incentive Program

WIN II Provides job placement for welfare recipients to help them become economically independent. Some 37,360 enrolled in 1972. Women volunteer for the program, whereas AFDC fathers are required by law to report to WIN. Women had lower dropout rates, but higher rates of termination than men, probably because of family responsibilities and inadequate child care arrangements. Unfortunately, women had lower placement rates than men. Yet, placement rates increased and dropout rates decreased with years of previous work experience.<sup>31</sup>

WIN II found more than 280,000 jobs during the first 18 months of a Federal program begun under the 1971 amendments to the Social Security Act. WIN II stresses job referral rather than training for AFDC recipients. Employers receive a 20 percent tax credit incentive on the employee's first year wages, if the employee is kept on the job a second year.

Of the 1,235,048 who registered for WIN II during 1973, 75 percent were women, 53 percent were white, 44 percent black, and three percent "other" minority. Sixty percent were 29 to 39 years old. Fourteen percent were under 22, and 26 percent were 40 and over. Fourteen percent had fewer than eight years of school; 80 percent had finished some high school courses; and six percent had some higher education. In all, 65,235 stayed on the job 90 days or more. The average starting wage for men was \$2.58; for women it was \$1.87.<sup>32</sup> One serious problem is that women are placed in traditional female occupations offering low wages.

### Concentrated Employment Program

Concentrated Employment Program provides services to persons in manpower and related programs in areas of high unemployment. CEP may offer job placement, pre-vocational orientation, or institutional training. Some 42,442 persons enrolled in CEP in 1972. The CEP program in Chattanooga has been very successful in training welfare mothers for non-traditional occupations.

### Neighborhood Youth Corps

This program provides work opportunity for youths 14 to 21 during the summer or after school. A total of 38,110 participated in 1972. According to a recent study, female enrollees experienced very small in-

<sup>31</sup> "The Effectiveness of Manpower Training Programs," op. cit., pp. 11-13.

<sup>32</sup> "More Than 280,000 Jobs Found for Welfare Recipients," News Release, Washington: Office of Information, Department of Labor, March 6, 1974, pp. 1-2.

creases in earnings as a result of training--\$83 annually for those with ten years of education.<sup>33</sup>

#### Operation Mainstream

This program creates jobs on public improvement projects providing training for chronically unemployed and senior citizens in rural areas. It enrolled 10,302 persons in 1972.

#### Public Service Careers Programs

In 1972, 10,302 disadvantaged persons were trained for jobs in public service.

#### New Careers Program

This program emphasizes immediate placement and on-the-job training. Some 1,306 persons were employed by private agencies, which received grants for their participation.

Expenditures in 1972 were \$424,553,000 for MDTA and \$591,871,000 for EOA. The average Federal allocation per trainee was \$2,028.74 in MDTA, while the average Federal allocation for EOA was \$4,326.24. With females comprising 37.4 percent of the total reported enrollments, a total of \$380,142,576 was spent for females and \$633,232,152 for males. The remainder supported programs which did not report trainees by sex. Thus, equitable expenditures were made for MDTA-EOA male and female enrollees by the U.S. Department of Labor in 1972. Of the \$1,480,857,460 spent on all occupational training, EOA received 40 percent; Vocational Education received 31.9 percent; and MDTA received 29.3 percent.<sup>34</sup>

#### VOCATIONAL-TECHNICAL PROGRAMS AND RELATED JOB EARNINGS

In order to determine the relationship between fields of vocational preparation and subsequent entry wages paid in related occupations a match between the OE instructional titles and the Department of Labor occupational titles was made. Such comparisons are difficult because of the lack of common nomenclature between these two Federal agencies.

Not all of the 136 OE instructional titles in Vocational-Technical education will match corresponding USDL occupational titles. However, Table 24 (pages 67 to 76) permits some comparison of average earnings of males and females in specific occupations corresponding to OE instructional titles. In most areas, the Dictionary of Occupational Titles (D.O.T.) code number is listed.

33

Ibid., p. 11.

34

Ibid., pp. 300-304

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Expenditures in 1972 were \$424,553,000 for MDIA and \$591,871,000 for EOA. The average Federal allocation per trainee was \$2,828.74 in MDIA, while the average Federal allocation for EOA was \$4,326.21. With females comprising 37.4 percent of the total reported enrollments, a total of \$380,142,576 was spent for females and \$633,232,152 for males. The remainder supported programs which did not report trainees by sex. Thus, equitable expenditures were made for MDIA-EOA male and female enrollees by the U.S. Department of Labor in 1972. Of the \$1,480,857,460 spent on all occupational training, EOA received 40 percent; Vocational Education received 31.9 percent; and MDIA received 29.3 percent.<sup>34</sup>

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Ibid., pp. 300-304

66

TABLE 24  
Enrollment in Vocational Education by OE Instructional Program by Sex,  
1972, and Job Entry Earnings by Related Occupation, 1972

OE Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
AGRICULTURE				
Agriculture Production	96.0%		Farmer, small medium, large farms	\$18,150 (\$6,481-\$10,466, \$37,503) av. net farm income (small, medium, large farms)
Agriculture Supplies & Services	95.2%		Farm, recreation business	\$1,630 per farm
Agriculture Mechanics	98.9%		D.O.T. 624-7281 Farm Equipment Mechanics	\$3.75 per hr.
Agriculture Products	92.2%		Commercial farmer	\$20,511 (\$5,888-\$48,700)
Agriculture Resources	92.4%		Agri. Resources Owner-operated	\$25,000 per year (\$10,000-\$40,000 per year)
Forestry	97.1%		D.O.T. 441.137 Forestry Aides & Technicians	\$5,563 per year (\$5,432-\$7,694)

TABLE 24 --Continued

Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
DISTRIBUTION				
Advertising Services	54.7%		D.O.T. 050.088 Advertising Workmen	\$8,250 per year (\$6,500-\$10,000)
Apparel & Accessories	66.9%		D.O.T. 260 Retail Trade	\$1,60 per hour* (does not include commercial if any)
Automotive	85.5%		D.O.T. 280.358 Salesworkers	\$212.50 per week (\$168 - \$257)
Food Services		61.9%	Waitresses D.O.T. 311.138	(\$1.71 - \$2.57) \$2.19 per hour excluding tips
Industrial Marketing	71.0%		D.O.T. 260 Manufacturers Salesworkers	\$9,000 per year
Petroleum	99.5%		Production & Non-supervisory Processing gas and oil extraction	\$8.97 per hour
Real Estate	68.1		D.O.T. 250.358 Real Estate Salesworker	Less than \$12,000 per year
Tourism	52.2		D.O.T. 079.128 Recreation workers	\$8,000 per year (\$7,000 - \$9,000)

TABLE 24--Continued

Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
HEALTH				
Dental Asst.		93.1%	Dental D.O.T. 079-378 Assistant	\$120.00 per week
Dental Hygienist		96.5%	D.O.T. 078-368 Hygienist	\$8,900 per year
Dental Laboratory Technician	58.6%		D.O.T. 712-381 Dental Lab. Technician	\$80 per week
Medical Lab. Assistant		77.5%	Medical Laboratory Assistant	\$6,200 per year
Other Medical Lab. Technology		84.7%	D.O.T. 249-388 Medical Records Technicians & Clerks	\$7,080 per year
Registered Nurse		90.3%	D.O.T. 075-118 Registered Nurse	\$6,100 per year (avg.)
Practical Nurse		94.5%	D.O.T. 079-378 Licensed Practical Nurse (L.P.N.)	\$120 per week (avg.)
Nurse's Aide		90.5%	D.O.T. 355-687 Nurse's Aide	\$97.00 per week (avg.)
Occupational Therapy		80.4%	D.O.T. 079-128 Occupational Therapy	\$10,700 per year (avg.)
Physical Therapy		70.4%	D.O.T. 078-378 Physical Therapy	\$8,700 per year
Medical Assistant		92.3%	D.O.T. 079-368 Medical Assistant	\$107.50 per week (avg.)

TABLE 24 --Continued

Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
Radiologic Technology		61.1%	D.O.T. 078.168 Radiologic Tech.	\$150.00 per week
Environmental Health	86.9%		D.O.T. 079.118 Sanitarian	\$7,800 per year (avg.)
Inhalation Therapy Tech.		55.6%	D.O.T. 079.368 Inhalation Therapist	\$604 per month

## CONSUMER AND HOME MAKING

Child Development		95.9%	Social Services Aides - Homemaker aides	\$6,500 per year
Clothing & Textiles		98.0%	Production workers (18 wage occupations)	\$2.61 per hour
Food & Nutrition		86.1%	D.O.T. 072.891 Food Technologist	\$7,497.00 per year (\$7,300 - \$7,694)
Home Management		92.8%	C.O.T. 099.228 Household workers	\$2,478.00 per year

TABLE 24--Continued

Instructional Program	Percent Male	Percent Female	HOME ECONOMICS		Average Earnings
			Occupation		
Care and Guidance of Children		92.8%	D.O.T. 022.891 Nursemaids		\$2,478.00 per year
Clothing Mgt. Production Services		95.4%	Production workers		\$2.61 per hour
Food Mgt. Production Services		75.2%	Cooks, waitresses, etc.		\$2.70 per hour (\$1.84--\$3.56)
OFFICE OCCUPATIONS					
Accounting and Computing		59.7%	D.O.T. 210.368 Bookkeeping Workers		\$489 per month
Business Data Processing Systems	51%		Bank Clerks		\$150 per week
Filing and Office Machines		82.2%	D.O.T. 213.198 Electronic Computer Operating Personnel		\$127 per week
			D.O.T. 132.338 File Clerks		\$96 per week

TABLE 24--Continued

OE Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
Personnel Training and Related		63.3%	D.O.T. 205.368 Personnel Clerks	\$95 per week (avg.)
Stenographer Secretary & Related		96%	D.O.T. 201.268 Stenographers & Secretaries	\$548 per month (\$515-\$581)
Typing & Related		79.6%	D.O.T. 203.138 Typists	\$109.00 per week
TECHNICAL				
Aeronautical Technology	86.0%		D.O.T. 002. Aeronautical Technician	\$4.60 per hour Non-professional (6,882.00 to \$7,700.00)
Automotive Technology	99.2%		D.O.T. 002. Mechanical technician	\$7,700 per year
Chemical Technology	79.8%		D.O.T. 002. Chemical Technician	\$6,157 per year (\$5,432 - \$6,882)
Civil Technology	96.0%		D.O.T. 002. Civil Engineering Technology	\$6,157 per year*
Electronics Technology	98.0%		D.O.T. 002. Electronics Technology	\$6,157 per year*

\*Same as Chemical Technology

TABLE 24 --Continued

Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
Environmental Control Technology	95.5%		D.O.T. 002. Technology	\$6,157.00 per year*
Industrial Technology	90.2%		D.O.T. 002. Industrial Production Technology	\$6,157 per year*
Instrumentation Technology	97.4%		D.O.T. 002. Instrumentation Technology	\$6,157 per year*
Commercial Pilot Training	93.4%		D.O.T. 196.168 Commercial pilot	\$17,206 per year
Fire & Safety Technology	99.2%		D.O.T. 373.118 Fire fighters	\$9,133 per year
Oceanographic Technology	91.5%		D.O.T. 024.081 Oceanographers	\$8,569.00 avg. per year (\$7,619 - \$9,520)
Police Science Technology	90.5%		D.O.T. 375.118 Police Officers	\$10,250.00 (\$9,500 - \$11,000)
Water & Waste Water Technology	86.8%		D.O.T. 975.782 Waste water Treatment Plant Operators	\$9,500 per year (\$5,000 - \$14,000)

\*Same as Chemical Technology.

TABLE 24 --Continued

Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
TRADE AND INDUSTRIAL				
Air Conditioning	96.0%		D.O.T. 002. Air conditioning Technician	\$5.12 per hour (\$4.00 - \$8.50)
Appliance Repair	97%		D.O.T. 037.281 Appliance Serviceman	\$4.87 per hour (\$3.05 - \$6.50)
Body & Fender Auto	98%		D.O.T. 807.381 Automobile Body Repairmen	\$6.52 per hour
Mechanics Auto	98%		D.O.T. 620.131 Automobile mechanics	\$6.15 per hour
Aviation Occupations	93%		D.O.T. 168.168 Aviation Occupations	\$5.37 per hour (\$4.19 - \$6.55)
Business Machines Maintenance	95.6%		D.O.T. 633.281 Business machine Servicemen	\$130 per week (\$1.10 - \$1.60)
Commercial Art Occupations		50.1%	Commercial Artists	\$80 - \$85 per week
Commercial Photography Occupations	74.3%		D.O.T. 143.062 Commercial Photography	\$80 - \$125
Carpentry	98.5%		D.O.T. 860.281 <sup>a</sup> Carpentry	\$7.55 per hour (\$7.41 - \$7.69)

TABLE 24 --Continued

Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
Electricity	99%		D.O.T. 821.381 Electrician	\$8.19 per hour
Masonry	99.9%		D.O.T. 861.781 Stone-Masonry	\$7.87 per hour
Plumbing and Pipefitting	99.9%		D.O.T. 862.381 Plumbers and Pipefitters	\$8.15 per hour
Other Construction & Maintenance	98.0%		Construction Building & Trades Journeymen	\$7.69 per hour
Custodial Services	84.9%		D.O.T. 187.168 Custodian	\$2.78 per hour avg.
Diesel Mechanic	98.7%		D.O.T. 625.281 Diesel Mechanics	\$4.79 per hour (\$4.29 - \$5.20)
Drafting Occupations	94.6%		D.O.T. 001.281 Draftsmen	\$525.00 per month \$131.50
Electrical Occupations	99.9%		D.O.T. 721.381 Electrical workers	\$5.04 per hour
Industrial Atomic Energy	76.4%		D.O.T. 002 Atomic Energy Technician	\$4.63 per hour
Instrument Maintenance and Repair	96.5%		D.O.T. 710.131 Instrument Repairmen	\$4.55 per hour (\$3.81 - \$5.29)

TABLE 24 --Continued

Instructional Program	Percent Male	Percent Female	Occupation	Average Earnings
Maritime Occupations	97%		D.O.T. 197.136 Marine Engineers	\$1,150 per month
Metalworking Occupations	99%		D.O.T. 600,280,518,381 Pattern workers, molders, coremen	\$4.21 per hour
Metallurgy Occupations	99.2%		Occupations in the Aluminum Industry	\$4.95 per hour
Barbering	83.4%		D.O.T. 330.171 Barber	\$187.50 per week (\$150 - \$225)
Cosmetology		94%	D.O.T. 332.271 Cosmetology	\$150.00 per week (\$100 - \$200)
Law Enforcement Training	92.1%		D.O.T. 375.118 Law-enforcement	\$10,250.00 per year (\$9,500 - \$11,000)
Refrigeration	92.7%		D.O.T. 637.281 Refrigeration Mechanics	\$6.25 per hour (\$4.00 - \$8.50)
Woodworking Occupations	93.7%		D.O.T. 661.281 Wood Patternmakers	\$4.60 per hour (\$4.35 - \$4.85)

Source: Summary Data Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education and Welfare, May, 1973, pp. 12-17.

Bureau of Labor Statistics, Occupational Outlook Handbook, 1974-75 Edition, Department of Labor, Washington: U.S. Government Printing Office, 1974.

Out of 84 OE instructional programs in Vocational-Technical Education and their corresponding D.O.T. job classification, comparisons are offered between male and female average entry earnings according to entry-level earnings for 1972 or 1973.

Those occupational areas in which girls aggregate lead to lower paying jobs than those in which boys predominate. The socially determined custom, accepted and reinforced by the schools, of pre-selection of occupations by sex perpetuates the problem of low wages for women in adult life.

TABLE 25

Comparative Average Entry Earnings for Male  
and Female, 1972-1973

Sex	Earnings By Hours	Weeks	Months	Year
Female	\$2.19	\$130.05	\$561.23	\$6,502.12
Male	\$4.22	\$139.87	\$837.50	\$9,744.14

Source: Summary of Table 24, pp. 67-76.

#### PLACEMENT

Of all students who completed secondary Vocational Education or left early with marketable skills, 46 percent were employed in 1972. Of all post-secondary students completing training or leaving early with saleable skills, 56 percent were employed. In adult education, 57 percent of all completers or early leavers were employed.

The following figures represent the placement records for completers or early leavers by occupational area.

Agricultural Education	50.1
Distributive Education	52.8
Health Occupations	61.7*
Gainful Home Economics	39.9*
Office Occupations	45.6*
Technical Education	56.6
Trade and Industrial Education	49.6

The so-called female occupations contain both the highest and lowest placement figures among the seven occupational areas. Unfortunately, non-wage-earning home economics has the highest concentration of females. If the lockstep between vocational preparation and limited pay and promotion for women is to be broken, then girls must enroll in non-traditional programs more freely than they have in the past.

35

Ibid., p. 216.

\*Female-intensive programs

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SUMMARY

A total of 11,602,144 persons enrolled in Vocational Education programs in 1972, with females accounting for over 55 percent. Secondary education enrolled 63 percent of the total enrollments with two-thirds of them female; post-secondary education enrolled 11 percent with two-fifths female; and adult education enrolled 26 percent with 46 percent female. In wage-earning vocational programs, females comprise 85 percent of the health programs, 76 percent of the office programs, and 86 percent of occupational home economics, three areas which promise relatively low earnings. Of the 128 OE instructional wage-earning programs, girls are in the majority in 15 health programs, six occupational home economics programs, and eight office programs. On the other hand, males are a majority in eight agricultural, 14 distributive education programs, 22 technical programs, and 40 programs in trade and industrial. Thus, boys have three times the options of girls in Vocational Education. According to rough estimates, programs in which girls predominate appear to have higher student/teacher ratios. In seven States, while female enrollments averaged 52 percent, expenditures for females, based on per unit costs, averaged only 37 percent of the dollars.

Home economics accounts for 49 percent of the female enrollments in Vocational Education. About 45 percent are in non-wage-earning programs; 14 percent of these female enrollments are in child development, consumer education, and food and nutrition, areas which are fundamental to the maintenance of human and economic well-being, but do not necessarily lead to jobs. The female-intensive programs in Vocational Education lead to female-intensive areas of employment, where earnings are about 60 percent of men's earnings. Women and men have very similar aptitudes for employment. If women are to break out of female-intensive Vocational Education programs and low-paying female occupations, they must enroll in increasing numbers in male-dominated technical and trade and industrial programs in order to qualify for employment as technicians, craftspersons, or as skilled workers, particularly in new, unstereotyped, occupations.

Although young women represent over half of the vocational high school graduates, they are 39 percent of the enrollments in post-secondary education and 46 percent of adult education enrollments. Within the post-secondary program, 59 percent of women are concentrated in only four out of seven specific technical offerings: registered nursing, practical nursing, secretarial, and educational occupations.

The U.S. Department of Labor enrolled 346,066 persons in five MDTA and six other manpower training programs in 1972. Studies of programs with the largest female enrollments indicate that women benefitted less than men.

## REFERENCES

Bureau of Labor Statistics. Occupational Outlook Handbook, 1974-75 Edition. Department of Labor. Washington: U.S. Government Printing Office. 1974.

Division of Vocational and Technical Education. Summary Data Vocational Education Fiscal Year 1972. Washington: Office of Education, Department of Health, Education, and Welfare. May, 1973.

Division of Vocational and Technical Education. Trends in Vocational Education Fiscal Year 1972. Washington: Office of Education, Department of Health, Education, and Welfare. June, 1973.

Durkin, Jon J. "The Potential of Women." Boston: Johnson O. Connor Research Foundation, Human Engineering Laboratory. 1971.

The Effectiveness of Manpower Training Programs: A Review of Research on the Impact on the Poor. A staff study for Subcommittee on Fiscal Policy, Joint Economic Committee, Congress of the United States. Paper No. 3. Washington: U.S. Government Printing Office. November 20, 1972.

Edis, Mary L. "Women in Technical Education." Speech at National Technical Education Clinic, Oklahoma City. March 26, 1971.

Gannon, Martin J. "A Profile of the Temporary Help Industry and Its Workers." Monthly Labor Review. May, 1974.

Hedges, Janice Weipert and Stephen E. Bemis. "Sex Stereotyping: Its Decline in Skilled Trades." Monthly Labor Review. May, 1974.

Hooper, Mary-Evans. Associate Degrees and Other Formal Awards Below the Baccalaureate, 1970-71. National Center for Educational Statistics. Office of Education, Department of Health, Education, and Welfare. Washington: U.S. Government Printing Office. 1973.

Kendrick, Chris. "Women Nudged Toward Technical Scientific Fields." The Christian Science Monitor. April 30, 1974.

Lee, Arthur M. and Robert Sartin. Learning A Living Across the Nation. Project Baseline, Second National Report. Vol. 2. Flagstaff: Northern Arizona University. November, 1973.

"More Than 280,000 Jobs Found for Welfare Recipients." News Release. Washington: Office of Information. Department of Labor. March 6, 1974.

Simpson, Elizabeth J. "Career Education-Feminine Version." Speech at the Regional Seminar Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

Sullerot, Evelynne. Women, Society and Change. New York: McGraw Hill Book Company, 1971.

Waldman, Elizabeth and Beverly J. McEaddy. "Where Women Work--an Analysis by Industry and Occupation." Monthly Labor Review, May, 1974.

Waldman, Elizabeth and Beverly J. McLaddy. "Where Women Work--an Analysis by Industry and Occupation." Monthly Labor Review. May, 1974.

## SEXISM IN SOCIETY AND EDUCATION

HISTORIC LEGAL DIFFERENCES IN SEX ROLES

Before the dawn of civilization, men left the cave to hunt animals and women stayed home with the children and gathered and prepared the bulk of the food. In the cradle of democracy, ancient Greece, men were citizens, but most women were slaves. Early Roman law viewed men as adults and women as perpetual children. The eldest son always inherited the property, which included women and slaves. The woman was under the hand (*manus*) of the man, but unlike a slave, she could not be "emancipated," but only handed from one man to another. This practice prevails in our custom of asking a father for the "hand" of his daughter in marriage.

The ancient Roman Law became the basis for English common law, which, in turn, was the foundation for colonial law in the New World.

Despite the doctrine that human rights are basic to all people, women and slaves were not safeguarded by the tenets of democracy. While Abigail Adams wrote to her husband John "to remember the ladies," the famous words, "all men are created equal," applied only to men. Women and slaves were disenfranchised.

Edward Mansfield, in the first major analysis of The Legal Rights, Liabilities and Duties of Women in 1845, stated: "the husband and wife are as one and that one is the husband."<sup>2</sup>

Elizabeth Cady Stanton was the leader of the first feminist meeting ever held in the United States or elsewhere. On July 19, 1848, female delegates to the Seneca Falls Convention declared:

We insist that they (women) have immediate admission to all the rights, and privileges which belong to them as citizens of the United States.

They demanded the right to an education, to enter professions, to earn a living, to control property, to sit on a jury, to make a will, and to conduct a business.

<sup>1</sup> Jo Freeman, "The Building of the Gilded Cage," Sex Role Stereotypes, Washington: National Education Association, October, 1972, p. 72.

<sup>2</sup> Ibid., p. 70.

He has monopolized nearly all the profitable employment and from those she is permitted to follow she receives but scant remuneration. He closes against her all the avenues to wealth and distinction which he considers most honorable to himself. As a teacher of theology, medicine, or law she is not known.

Thus, the limited opportunities for education and employment which handicap women today have their origin in early history. Unfortunately, few of the contributions made by women in their centuries of struggle have been recorded.

The Civil War opened up opportunities for women outside the home. Women worked in government service as clerks, bookkeepers, and secretaries. Women established hospitals, nursed the wounded, or worked as cooks and laundresses. Many entered public life to serve the abolitionist cause.

In the main, the nineteenth century woman worked to support her husband and household.

Typical woman's work included, in addition to all of the housework, the care of poultry, the dairy, including milking, feeding, tending the cows, and making butter and cheese; the care of any other barnyard animals; the "kitchen" or vegetable garden; and such chores as sewing, mending, making candles and soap, feeding the hired hands and working in the fields if necessary.

By the end of the nineteenth century, women were working for wages as teachers, nurses, office workers, household domestics, and prostitutes. They also worked in factories, but restrictive labor laws served as a kind of social control by men who saw women as competition in the newly emerging society brought about by the Industrial Revolution. Those occupations which men relinquished to women lost prestige and the advantages of equal pay. Men excluded women from unions, contracted with employers to hire only men, and passed laws limiting the employment of married women. "Protective" labor laws have protected the jobs of men by denying women overtime pay, promotions, and opportunities.

<sup>3</sup> "Education for Survival: Sex Role Stereotypes," Prototype Materials; Conference organized by National Education Association, November 24-26, 1972, pp. 37-38.

<sup>4</sup> Janice Law Tröcker, "Women in U.S. History High School Textbooks," Social Education, National Council for the Social Studies, March, 1971, pp. 130-131.

<sup>5</sup> Freeman, op. cit., p. 72.

It took 50 years after the passage of the Fifteenth Amendment for women to receive the right to vote in 1920. Women's legal rights as a social issue were dormant until the 1954 case of Brown vs the Board of Education of Topeka, Kansas. The Equal Pay Act, an amendment to the Fair Labor Standards Act, was passed in 1963. However, 54 years after the passage of the Women's Suffrage Amendment, the Equal Rights Amendment lacks sufficient State support for ratification, another indication of the contemporary inequality of women.

#### PREVAILING ATTITUDES ABOUT WOMEN

Sexism in American pervades our society with continuous reminders of the differences between the sexes--differences fostered more by cultural conditioning than biologic imperative. Girls are dainty and sweet; boys are aggressive and stubborn. Girls cry; boys don't. Light pastels are feminine; dark browns, blues, and blacks are masculine. Males are dominant; females are subordinate. Girls are talkers; boys are thinkers. If your income is limited, educate your son--your daughter can find a husband.

Women are viewed as inferior. Modern slang is full of derogatory terms for women. Our entertainment media exploit females as sex objects. Advertisers use scantily-clad women to sell everything from shaving creams to cars. Virtually every object in our society takes on sexual symbolism that is gratifying to the male.

#### Family Influences

Children are treated by their families in different ways according to their sex. Boys are handled roughly; girls are cuddled. Boy babies are dressed in blue; girl babies are dressed in pink. Adults choose action toys like footballs, baseballs, and bats for boys. Girls are given dolls and dollclothes for sedentary activity and play fantasy. Girls receive tiny pots and pans and boys receive play tool kits.

Very few studies of child-rearing practices comparing parental treatment of boys and girls have been made, but those that have indicate the existence of traditional differences in practice. Girls receive more affection, more protectiveness, more control, and more restrictions. Boys are subjected to more achievement demands and higher expectations from parents. Girls are discouraged from being independent and physically active.

With sons, socialization seems to focus primarily on directing the boy's impact on the environment. With daughters, the aim is rather to protect the girl from the impact of environment. Thus, boys are taught to shape their own world, while girls are taught to let the world influence

them. Over-protected boys tend to develop intellectually like girls. Girls who are active are those whose mothers left them alone to solve problems independently. Tests of analytical thinking of school-age children indicate that boys perceive analytically and girls contextually. Not enough research has been conducted yet to state conclusively whether sex-related behavior is caused by early physiological differences or upbringing, but since the reward system seems to be capable of modifying behavior, family treatment of the child early in life may well be the stronger influence.<sup>7</sup>

#### The Religious Influence

The Judeo-Christian and Muslim religions perpetuate traditional sex roles and extreme bias through elaborate theologies. Women are subordinate in most faiths. "Although the churches have encouraged girls and women to contribute to the faith through women's religious organizations, women have been denied participation as clergy or as members, in some cases. Even their active participation in the worship service or as lay leaders has been restricted. In the Catholic church, boys serve as acolytes. In the Protestant church, girls wait on the communion table. The men serve as ushers; the women prepare the altar cloths.

#### Community Attitudes

The most powerful community and societal influence upon the child is television. Programming, production, and content are controlled by men. The newscaster, the sports announcer, and the weatherman are all male, although recently more women, including black women, are appearing in these roles both on local and national networks. However, in a recent monitoring of one local channel, the National Organization for Women found that commercials portrayed men in dominant roles and women in the menial, domestic role in all but a few instances.

Within the power structure of the community, the housewife is powerless to such an extent that wives without jobs generally introduce themselves with the epology, "I'm just a housewife." There are few role models for girls and women to emulate in business, industry, and on corporate boards. The higher one looks on the company organizational chart, the fewer the women. In volunteer organizations, women have found an outlet for their occupational ambitions, but the executives are invariably males. In politics, on city councils, on local boards of education, on county commissions, and in the courtrooms, women are very scarce. There is no woman justice on the Supreme Court; among 97 Federal appeal court judges, one is a woman; of 402 Federal district court judges, four are women; of 93 Federal district attorneys, all are men, according to Time's special issue, "The American Women," March 20, 1972. With so few women in decision-making roles, a woman often is reluctant to participate in community action.

<sup>7</sup> Ibid.

### Societal Attitudes

Textbooks are strangely silent on the role of women in history. Their contributions to arts and sciences, politics, and education occupy few pages. Most women who have achieved renown had the rare advantage of a gentleman's education to help them rise above their station. Yet, even the great queens who fought for their crown did little to ennoble the cause of all women. Matable women are weighed in terms of their support of and contribution to male-established institutions. Such non-conformists as Florence Nightingale and Clara Barton are honored for tending soldiers during war. Georg Eliot, the great social novelist, had to assume a masculine name to gain an audience. Until the Suffragettes and Abolitionists of the nineteenth century, few women were able to develop their own aesthetic, judgement, and reason, seek an independent identity, or impose their own values on the world. Thus, women like Harriet Beecher Stowe, Lucretia Mott, Susan B. Anthony, Carrie Nation, Sojourner Truth, Harriet Tubman, all reformers in the cause of human justice, are truly unique.

The position of women in society has been an inferior one. Negative, demeaning attitudes toward women are prevalent in school, community, and the labor market. "An incompetent man can get about in nine countries," says a Chinese proverb, "but a competent woman can only get round her cooking stove."

Those first few women who are hired for or promoted into top level management positions often are isolated. As Rosabeth Kanter observes:

The token woman may have difficulty with competent performance because she is lost in one of four stereotypical roles: "the mother, the sex object, the pet or 'iron maiden'."

Awareness of these stereotypes are important for characterizing group dynamics around the few women in formerly all-male organizations:

1. Mother. A solitary woman sometimes finds that she has become a "mother" to a group of men. They bring her their troubles, and she comforts them. The assumption that women are sympathetic, good listeners, and can be talked to about one's problems is a common one in male-dominated organizations . . . .
2. Seductress. The role of seductress or sexual object is fraught with more tension than the maternal role for it introduces an element of sexual competition and jealousy . . . Should the women cast as sex-object (that is, seen as sexually desirable and potentially available--seductress is a perception; the woman herself may not be consciously behaving seductively) share her attention widely, she risks the defacement of the whore. Yet should she form a close alliance with any man in particular, she arouses resentment . . . .

3. Pet. The "pet" is adopted by the male group as a cute, amusing little thing and symbolically taken along on group events as mascot, a cheerleader for the shows of male prowess that follow . . . She is expected to admire the male displays but not enter into them; she cheers from the sideline . . .

4. Iron Maiden. The "iron maiden" is a contemporary variation of the stereotyped roles into which strong women are placed. Women who fall into any of the first three roles, and in fact resist overtures that will trap them in a role (such as flirtation), may consequently be responded to as "tough" or dangerous . . . The solitary situation of the token woman contributes to the stereotyping in organizational roles.<sup>8</sup>

There are many popular sentiments that reinforce female inferiority:

- The unadmitted discomfort that some people feel working under the supervision of a woman
- Latent sexual attitudes that undermine the transfer of women from bedroom to board room
- The belief that a woman's natural biological function is to stay home to become housewife and child rearer
- The popular fallacy that women are less stable and less competent.<sup>9</sup>

Such social stereotyping on the part of citizens, particularly employers, tends to restrict girls' free choice of future life roles. Girls will continue to view their futures only in terms of a home and family and boys will associate their future with a career until society recognizes that careers, marriage, and homelife are not prescriptions, but alternatives--for both sexes.

#### The Psychology of Women

Psychologists and anthropologists seem to agree that sex-equated traits are the responses we make in living up to the expectations of society. In our culture, females have a monopoly on subjectivity, passivity, in-

<sup>8</sup> Rosabeth Moss Kanter, "Women in Organizations Change Agent Skills," Speech, New Technology in Organization Development Conference, New Orleans, Louisiana, February 18, 1974, pp. 3-6.

<sup>9</sup> Barbara Lett Simons, "Should Women Have Equal Education and Employment Opportunities?" Speech, Regional Seminar/Workshop on Women in the World of Work, Technical Education Research Centers, October, 1973, p. 3.

...tuitiveness; and aesthetic sensitivity, while aggressiveness, competitiveness, courage, logic, and inventiveness are exclusively male traits.<sup>10</sup>

Women are trained to accept their secondary status through socialization. Society defines appropriate sex roles, rewards those who behave properly, and ostracizes those who deviate. Studies of women confirm the power of social conditioning and its often tragic consequences for women. In one study, women described themselves as uncertain, anxious, nervous, hasty, careless, fearful, childish, helpless, sorry, clumsy, stupid, silly, and domestic. Women also viewed themselves as understanding, tender, sympathetic, pure, generous, loving, moral, kind, grateful, and patient.<sup>11</sup>

Teraan and Tyler, in their review of literature on sex differences among young children, listed these traits for girls: sensitivity, conformity to social pressures and environment, ease of social control, ingratiation, sympathy, and low levels of anxiety. Girls compared to boys, however, were more nervous, unstable, neurotic, socially dependent, emotional, ministrative, fearful, and submissive and had less self-confidence and lower opinions of themselves and of girls in general. All of these characteristics are self-denigrating, and were found among cultures under colonial control: the American Indians under British rule and the Algerians under the French.<sup>12</sup>

All "feminine" traits are not intrinsically bad. The supreme irony is that women are conditioned to exhibit those characteristics that are not valued highly in our culture.

#### DISCRIMINATION IN EDUCATION

Sexism exists everywhere, but schools are guilty of discrimination against females both overtly and covertly, if for no other reason than that schools reflect the society they serve. The current low status of women educators is discriminatory not only against them, but also against girls in the classroom by failing to provide female role models. The lower the grade level, the larger is the number of women.

School policies that prevent girls from enrolling in industrial arts and boys from enrolling in homemaking or that place all the boys in "Bachelor Living" classes discriminate against both sexes by sexual segregation within the school. Teachers inadvertently treat boys and girls differently. Textbooks are rampant with sex-role stereotypes. Children come to school with sex traits established. The schools merely reinforce

10

Jack Conrad Willers, "The Impact of Women's Liberation on Sexist Education and Its Implications for Vocational-Technical Education," Speech, Regional Seminar/Workshop on Women in the World of Work, Technical Education Research Centers, October, 1973, p. 4.

11

Freeman, *Op. cit.*, p. 76.

12

Ibid.

these and traditional sex roles and thus, limit children's choices in education, work, and life.

#### Pre-Kindergarten and Primary School

Early home conditioning of boys and girls has shaped their basic pattern of behavior, their outlook, and their expectations. By the time they enter school—even pre-school—children have attached greater significance to male roles, male occupations, and the male world. Most little girls are well aware of their proper place. And school experiences strengthen it. The kindergarten has segregated space; the dolls and kitchen are in one section for the girls and blocks and trucks in a section for boys. The instructional supplies include plastic "models" of familiar figures for children to identify with: community helpers like the fireman, policeman, male bus driver, and female nurse, the family members—mother in her apron, daddy in his business suit—all reinforcing the conventional mold and limiting the child's desire or expectation of breaking out of it.

The teacher and her aide, assign sex-specific tasks. The girls wash the sink and water the plants and tidy up the tables. The boys move the chairs and stack the equipment, take care of the animals, and empty the wastebaskets.<sup>13</sup>

Children in elementary school are surrounded by female teachers. This may be damaging to boys, who grow up in a female-oriented world until puberty. However, the "power" figure in the school is more likely to be a male. This only serves to corroborate girls' subordinate role and lower her expectations.

Girls are much better pupils in traditional elementary schools, which demand obedience and passivity. Girls are also more verbal than boys and they begin speaking, reading, and counting earlier. They put words together into sentences earlier and articulate more clearly. They are less prone to stuttering.<sup>14</sup> Girls are even better at math in elementary school.

However, grade school boys have more positive feelings about being male and are confident and assertive. As boys and girls progress in school, girls' opinions of boys become increasingly higher and their opinions of girls become lower. As their enthusiasm about being females dwindles,

13

Marie Froehle, "It's Never Too Early: Sex-Role Stereotyping in the Pre School Years," *Colloquy*, November, 1973, pp. 16-17.

14

Freeman, *op. Cit.*

they lose confidence in their general adequacy, their popularity, and their accomplishments. Recent studies indicate that while girls' awareness of careers is increasing in variety, they are unable to identify what a day on the job would be like. Boys, however, can describe career activities in detail.<sup>15</sup>

### Textbooks

Textbooks, basal readers, and children's library books reinforce sex differences and limit girls' perceptions of themselves and their futures. Teachers and librarians sort books for boys and girls. A task force of the National Organization for Women in Princeton, New Jersey, spent two years reviewing children's readers to locate non-sex-stereotyped series. They read 134 books from 12 different publishers and found none.<sup>16</sup>

Many texts portray boys in a variety of activities, while girls invariably are helping mother with the baby or baking cookies. The numbers of stories about boys outnumber stories about girls by four to one. The same traits that home and society, community and television have reinforced are repeated in textbooks.

The message of female inferiority also is repeated in library books. The American Library Association has reviewed children's library books and reached similar findings. Boys as the central story character outnumber girls as the central figure by a ratio of two to one. The same is true of biographies; there are relatively few books about famous women. Unfortunately, in first grade alone, as much as 80 percent of a child's school day is spent on textbooks and supplemental reading books which adversely influence girls' self-concepts.

The way in which role models are portrayed is also a problem in curriculum materials. Girls are shown as physically inactive and unable to perform tasks requiring strength. They are never shown in careers which might conflict with the wife and mother role. Boys are problem solvers and mischief-makers. Mothers are shown in the home doing nothing other than housework. Fathers are shown as the jobholders and decision makers who provide entertainment for children. Both images need to be balanced by depicting women in careers and men as parents with a share of domestic responsibilities.

### Staff Attitudes

The most damaging sex-role stereotyping at school is committed by the

15

Lynne B. Iglitzin, "A Child's Eye View of Sex Roles," Reprint, The Schools and Sex Role Stereotyping, Prototype Materials for Conference organized by National Education Association, November 24-26, 1972.

16

Carol Jacobs and Cynthia Eaton, "Sexism in the Elementary School," Today's Education, December, 1972, p. 21.

classroom teacher, who is in the strongest position to influence the values and expectations of students. As members of a stereotyping society, all of us have been preconditioned to practice prejudicial behavior, which can be eliminated by awareness of sex-biased actions.

Teachers demonstrate sex-role stereotyping in their classroom teaching, in their treatment of students, and in their assignments of classroom tasks. Stereotyped teaching practices include emphasizing differences between the sexes; admonishing students to act like young "ladies and gentlemen"; anticipating that boys will be harder to manage than girls; assigning homework by sex; segregating seating arrangements; and encouraging rivalry between the sexes by segregated games. Some teachers may even show a stronger preference for one sex.

As mentioned earlier, boys, in elementary school are dominated by an overabundance of female teachers--as damaging as discrimination against girls. Assertive boys resent the preference shown to girls and the expectation that they should behave passively.

Teachers must avoid attitudinal or overt behavior which indicates that one sex is superior to the other. Teachers, like the rest of society, need retraining to change their behaviors and attitudes.

#### Sex Stereotyping in High School

In high school, girls continue to make consistently better grades than boys. However, their opinions of themselves and other girls decrease. In their desire to be popular, girls accept the limited options open to them and resign themselves to appropriate female roles on a day-to-day basis. Boys, however, have an increasingly higher opinion of themselves and a lower opinion of girls as they grow older. By the time girls leave high school, they are prejudiced against women to such an extent they may be unable to recognize the accomplishments of women in careers. Such unconscious assumptions surely contribute to the myth that it is indeed a man's world and the women in it are incompetent.<sup>17</sup>

Horner's study of undergraduate women at the University of Michigan found that 65 percent of the women, but only 10 percent of the men, associated academic success with negative consequences.<sup>18</sup> It just may be that cultural conditioning about female inferiority is so strong that girls substitute popularity for personal achievement, and many actually denigrate success as unfeminine.

Unfortunately, public schools contribute to these restricting beliefs. Classes are by and large available to both sexes alike in elementary school. However, during middle school and junior high, homemaking is offered to girls and industrial arts to boys. Such segregation is not only in violation of Title IX of the Education Amendment of 1972, but also

<sup>17</sup> Freeman, op. cit.

<sup>18</sup> Ibid., p. 77.

contributes to the myth that females do not possess manual dexterity. Curriculum appropriate in 1917, when fewer than one-fifth of all women worked outside of the home, is being foisted upon millions of youth three generations later. As previously discussed, it is just as important to human survival and well-being for boys to cook and mend and care for a home and children as it is for girls to be able to repair the toaster, replace the window panes, and understand the principles of both the internal combustion and rotary engines. Imagine the horror of the progressive home economics specialist who, after successfully integrating the junior high classes, visited one class where 30 students, both boys and girls, were busy-making aprons!

The other segregated class is physical education. In most schools, while there is likely to be a higher enrollment of females, more sports options are available to boys. The faculty may include a larger number of male gym teachers, and more instructional space and time may be devoted to boys' gym and recreation. The extra-curricular sports program may provide no opportunity for girls to participate in team sports--including intramurals. Classes with huge enrollments providing little opportunity for individual participation contribute to women's negative attitude toward athletic activities. What effect it may have on women's physical development is unknown, but there is increasing evidence of the importance of regular exercise to the maintenance of well-being throughout life. Many women lead very sedentary lives, and are barred from certain jobs, perhaps because of inadequate physical education in school.

A study by the National Organization for Women of the athletic program in Westfield, New Jersey, illustrates the severe neglect of sports programs for girls. Boys were offered seven more sports options than girls in the overall program. In interscholastic sports, boys had 18 offerings while girls had four. Slightly less than one-half the participants in the total sports program were girls, possibly because the budget for girls was \$5,000 for extra-curricular activities and \$43,900 for boys. The per capita expenditure for girls was \$6.73; for boys it was \$40.80.<sup>19</sup>

Despite the pervasive sex bias in athletics, signs of change are appearing in the world of sports. Universities have increased substantially the expenditures for women's athletic programs. For example, the University of Washington increased its budget for women's athletics from \$18,000 in 1973-74 to \$200,000 in 1974-75. Scholarships for women athletes have become a reality. All-female athletic competition has increased enormously; 800,000 women participated at the end of 1973 compared with 300,000 who competed in 1971. Mixing of the sexes in non-contact sports now is permitted in most recreational high school and collegiate programs.

19

Jean L. Ambrose, "Analyzing Physical Education for Equality," *Women's Studies Newsletter*, Spring, 1974, p. 9.

At some schools, women have been recruited for men's sports.

Kentucky has passed a law which requires that every public high school sponsoring boys' varsity sports also must sponsor girls' varsity sports. State Senator Nicholas Baker, who introduced the legislation, summed it up.

The idea of sports in school is not to create a feeder system for the pros but to create an interest that will carry over into the adult years, so people will know how to keep in shape when they are past 30. This is just as important for girls as for boys.<sup>20</sup>

Professionally, interest in women's sports is apparent in the success of Billie Jean King in tennis. Purses and prizes in golf and skiing have increased greatly. Even television has responded to women's athletics by extending network coverage. The Federal government has contributed to the change in education with Title IX of the Education Amendment of 1972, which prohibits sex segregation in school activities.

Clifford Fogan, head of the National Federation of State High School Athletics says:

In the past girls shied away from sports because it was not ladylike . . . Girls now think athletics are fun . . . Girls demanding equal funds may modify the big-budget, win-at-any-cost programs existing some places for boys. But I think that would be a good thing. The inevitability of change is beginning to be felt in amateur and professional athletics and will accelerate in years to come.<sup>21</sup>

In terms of the high school curriculum, girls still receive differential treatment. They are restricted to vocational programs providing preparation for lower paying "female" occupations. Fewer girls enroll in mathematics beyond fundamental algebra and geometry, and physics and electronics are almost as segregated as industrial arts. While such classes are not "closed" to girls, social expectations of male superiority in math and science, reinforced by family, school, and peers, serve as a covert restriction which later bars women from enrolling in technical programs.

The result of the educational process is unequal opportunity for female graduates. From early childhood education on, the socialization process is a self-fulfilling prophecy: stereotypic sex roles for males and females limit educational and career opportunities. This results in the loss or underutilization of female talent and places enormous pressures on men to succeed financially in a highly competitive world.

<sup>20</sup> Bill Gilbert and Nancy Williamson, "Women in Sports: A Progress Report," Sports Illustrated, July 29, 1974, p. 28.

<sup>21</sup> Ibid., pp. 26-31.

### THE PREGNANT TEENAGER

While several publications have been addressed to the plight of the pregnant teenager--both to the girl and to society--the problem has not been addressed in relation to Vocational-Technical Education for women. The problem is reviewed here for these reasons:

1. Pregnancy is the principal cause of school dropout among girls.
2. Undereducated females and their children increase substantially the numbers of financially dependent people, a problem for them and their families and for society.
3. Home economics and consumer education, which have the largest enrollments in secondary Vocational Education, have an obligation to teach family living so that students can acquire skills needed for effective human growth in today's world--needed by all, but an acute and immediate need for the expectant mother.
4. Unwed pregnant teenagers need immediate occupational skills in order to support themselves and their babies.
5. Implications for child care among teenage mothers and working women can be addressed simultaneously.

Despite the decrease in the birthrate, the number of pregnant teenagers is increasing both as a result of peaking secondary school enrollments and increasing numbers of sexually active youth. More than 210,000 school-age girls give birth each year, some 200,000 between the ages of 14 and 19.<sup>22</sup> These young mothers come from all types of backgrounds, rich and poor, black and white. The problem is more severe in the inner city, where poor families can ill afford another mouth to feed and can offer fewer options for their daughters than more affluent families. The majority (60 percent) of unwed mothers are white. Yet, of those who became pregnant at age 15 and under, the majority (60 percent) are members of minorities. Maternity homes serve only five percent, and most girls remain at home during pregnancy. By the time the child is born, 60 percent will be married.<sup>23</sup> Nearly six in ten of all first births among 15 to 19-year-olds

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B. Shanus, "Help for Girls in Trouble: Special High School in New York City," Parents, June, 1971, p. 81.

23

Marian Howard, "Pregnant School Age Girls," The Journal of School Health, September, 1971, p. 361.

are conceived out of wedlock, and 27 percent of births to this age group are born out of wedlock.<sup>24</sup> It is estimated that 50 to 85 percent of all marriages between school age youth are complicated by pregnancy.<sup>25</sup> The actual number of illegitimate pregnancies among teenagers is impossible to calculate, because middle-income parents either quietly arrange a marriage between the girl and the father, conceal the pregnancy and put the child up for adoption, or arrange for a legal abortion, which is increasing as an alternative to pregnancy among some women.

#### Consequences to the Mother

The consequences of pregnancy are overwhelming to the teenager. Whatever options about her future life style she may have had suddenly are very limited, and she is faced with hard and immediate decisions. School-age pregnant girls are medically high risks. They have more complications with pregnancy and delivery than older women. The younger the girl is, the higher her health risk. The nutritional demands of pregnancy may compromise her growth potential.<sup>26</sup> While some of these complications are biological, many of them are societal--linked to poor nutrition and lack of pre-natal medical care.

What are pregnant girls to do? The majority will marry, often a decision made by parents. Many are forced into an early marriage with a partner they might not have chosen otherwise. Many may drop out of school. The younger the girl is the greater the likelihood that she will never return, a great personal loss at an early age when few skills are developed fully. She may remain in her parent's home suffering the emotional shock of being cut off from her peers. She may put up her baby for adoption or she may be among the high rate of attempted suicides. But the majority of unwed teenage mothers keep their illegitimate babies. Thoughts of a future career are substituted by plans for child-rearing.

#### Consequences to the Child

And what of the child born to the teenage mother? Young mothers are much more likely than older women to have premature babies with low birth weights. Premature, underweight babies are high risks in two ways--high risk for infant mortality and high risk for birth defects. The chances that the baby will be stillborn, will die soon after birth, or be born with a serious physical or mental defect are much higher for the very young mother than for the young woman in her twenties.

<sup>24</sup> Jane Menkin, "The Health and Social Consequences of Teenage Child-bearing," Family Planning Perspectives, July, 1972, p. 45.

<sup>25</sup> "Pregnant Teenagers," Today's Education, October, 1970, pp. 27-28.

<sup>26</sup> Howard, op. cit., p. 362, and Today's Education, p. 27.

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<sup>26</sup> Howard, op. cit., p. 362, and Today's Education, p. 27.

Infant mortality rate is extremely high for mothers under 15. The infant mortality rate for out-of-wedlock births exceeds that for legitimate births. Non-whites have three times the rate of infant mortality than white infants during the first four months of life. One study has found that infant death rates due to respiratory infections and accidents are twice as common among low-income illegitimate births.<sup>27</sup> A study in England in 1949 established neonatal mortality among single live-births at 16.4 per 1000 legitimate births; 22.4 per thousand for births occurring during the first nine months of marriage; and 27.0 per 1000 for out-of-wedlock births. Of infants between 6-12 months, post-neonatal mortality for all income groups is highest among the youngest mothers. For young mothers under 20 of three or more children, the risk of neonatal or fetal death is 90 percent higher than for older mothers. Unfortunately, girls who have a first child early tend to bear subsequent children in rapid succession.<sup>28</sup>

Perhaps an even more tragic risk to the children of teenagers is the higher incidence of both mental subnormality and neurological defect in surviving premature infants born out-of-wedlock. Those running the highest risk of having an infant of low birth weight are unmarried, low-income black women under the age of 15. Prematurity and low birth weight have been linked to epilepsy, cerebral palsy, mental retardation, and higher risks of blindness and deafness. Another study links increased risks of congenital defects such as intracranial or spinal injury, breathing difficulty, and clubfoot, to first births of young mothers.<sup>29</sup>

#### Consequences to the Society

And what are the social consequences of teenage pregnancy? The educational, economic, and welfare systems are affected by teenage pregnancy. As was mentioned previously, pregnancy is the chief cause of school dropout for girls. Of those who drop out, the majority do not return to school, a loss to the society of a productive talent missing out on the opportunity for school-related skill development. Of those teenagers forced into a hasty marriage, the likelihood of future divorce is high. A second risk to society is that teenage married couples suffer economic disadvantages in terms of occupation, income, and assets compared with other couples.<sup>30</sup>

The economic costs to society will never be determined accurately. However, those studies of illegitimacy that have been done predict high

27

Jeffrey R. Beller and John Kiraly, Jr., "An Educational Program for Pregnant School-Age Girls," The Clearing House, April 1973, p. 477.

28

Menkin, op. cit., pp. 48-49.

29

Ibid., p. 50.

30

Ibid., p. 21.

costs to the society. Krantz estimated that one illegitimate child requiring public assistance costs the society some \$100,000 over a lifetime. Teenage girls who become pregnant out-of-wedlock and who receive public assistance have an average of eight additional children in subsequent years.<sup>31</sup> These children often suffer decreased growth and intelligence and the tragic consequences of poverty. In 1971, 31 percent of families on welfare were headed by a woman. The chances are good that not too many years ago many mothers of these families were among the 200,000 unwed teenagers delivering their first child. Additional costs to the society include medical care for surviving infants with serious health problems. The costs of special education and institutionalization for children with chronic defects also must be considered.

#### School Programs and Pregnant Girls

Fewer than one-third of the public schools make provisions for educating pregnant girls. Most schools have regulations to exclude the pregnant teenager, some as soon as school staff are aware of her pregnancy. Others establish a time limit. In a study of 17,000 school districts reported in the American School Board Journal in April 1971, only 5,450 districts provide for pregnant girls.

Some school districts let pregnant girls attend night school and adult education classes. Some provide a homebound teacher. Some schools solve the problem by allowing girls to remain in their regular programs, treating the physical condition like any other short-term illness. A few districts deal with the situation creatively by providing for pregnant teenagers within the regular school program, but tailoring special services to the needs of the girls. Still others offer girls a choice of all these options plus a special education program which provides services, preparation for motherhood, and occupational skill training. Such schools recognize that the long-term payoff of such programs increases the likelihood of the mother to complete her education and have a healthy, well-born baby and decreases the need for expanding special education services at the pre-school and kindergarten level.

Few situations are more painfully discriminatory than the plight of the pregnant teenager excluded from school without knowledge and skills. But the consequences are shared by all, the young mother, her child, society, and the schools that will be educating the child and subsequent children within at least five years.

#### CHILD CARE FOR STUDENTS

The lack of child care facilities has implications for students of occupational training programs as well as for women in the world of work.

<sup>31</sup> Hallett and Kiraly, op. cit., p. 477.

Many mothers are unable to seek or complete job training, find employment, and help improve the income of their families, because they cannot arrange for adequate care for their children. Post-secondary and adult education programs must come to grips with the need for optimal day care facilities in order to increase the number of women participants. Moreover, the development of day care and nursery school programs can provide another avenue of training and employment for both women and men.

Potentially, child care programs can free young mothers who wish to continue their education, afford practical on-the-job training, and provide employment for trained graduates in the field of child care and development. Whether supported by the community, by educational institutions, corporations, or by the government, child care programs are imperative, if women are to have equal opportunities for education and employment.

#### SUMMARY

Women have been viewed historically as the weaker sex. However, sex roles have been created more by social structures than by physiology. Attitudes perpetuated in the world around us have conditioned women to be dependent, passive, and submissive rather than assertive and competitive, two traits needed for success in the world of work. Because schools reflect the society they serve, they perpetuate sexism from pre-school through high school through teacher behavior, textbooks, and inadequate female role models. Sex-segregated classes, like homemaking, and unequal expenditures preferential to males are in violation of Title IX of the Education Amendment of 1972. Stereotyped sex roles limit the motivation of females to compete and to contribute to society and the economy.

Most female high school students who drop out do so because of pregnancy. Although these teenagers often lack occupational and homemaking skills, few public or vocational schools offer programs which might alleviate the serious consequences of this problem to the mother, to the child, and to society. Limited educational options for young women produce unskilled adults who are unable to support themselves or their families adequately.

The lack of adequate day care facilities, as well as needed information, prevents women from continuing their education or earning a living, and thus contributes to poverty.

REFERENCES

Ambrose, Jean L. "Analyzing Physical Education for Equality." Women's Studies Newsletter. Spring, 1974.

"Education for Survival: Sex Role Stereotypes." Prototype Materials. Conference organized by National Education Association. November 24-26, 1972.

Freeman, Jo. "The Building of the Gilded Cage." Sex Role Stereotypes. Washington: National Education Association. October, 1972.

Froschl, Merle. "It's Never Too Early; Sex-Role Stereotyping in the Pre-School Years." Colloquy. November, 1973.

Gilbert, Bill and Nancy Williamson. "Women in Sports: a Progress Report." Sports Illustrated. July 29, 1974.

Heller, Jeffrey R. and John Kiraly, Jr. "An Educational Program for Pregnant School-Age Girls." The Clearing House. April, 1973.

Howard, Marian. "Pregnant School Age Girls." The Journal of School Health. September, 1971.

Iglitzin, Lynne B. "A Child's Eye View of Sex Roles." Reprint. The Schools and Sex Role Stereotyping. Prototype Materials. Conference organized by National Education Association. November 24-26, 1972.

Jacobs, Carol and Cynthia Eaton. "Sexism in the Elementary School." Today's Education. December, 1972.

Kanter, Rosabeth Moss. "Women in Organizations Change Agent Skills." Speech. New Technology in Organization Development Conference. New Orleans. February 18, 1974.

Menkin, Jane. "The Health and Social Consequences of Teenage Child-bearing." Family Planning Perspectives. July, 1972.

"Pregnant Teenagers." Today's Education. October, 1970.

Shanus, B. "Help for Girls in Trouble: Special High School in New York City." Parents. June, 1971.

Simmons, Barbara Lett. "Should Women Have Equal Education and Employment Opportunities?" Speech. Regional Seminar/Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

Trecker, Janice Law. "Women in U.S. History High School Textbooks." Social Education. National Council for Social Studies. March, 1971.

Willers, Jack Conrad. "The Impact of Women's Liberation on Sexist Education and Its Implications for Vocational-Technical Education." Speech. Regional Seminar/Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

STAFF-RELATED PROBLEMS FOR  
WOMEN IN EDUCATION

Of the two sexes, females are more successful learners—as measured by the expectations and grading patterns of the public school staff. A higher percentage of girls graduate from our public high schools. In 1970, of the 2,386,000 graduates, 50.5 percent were girls.<sup>1</sup> The cultural conditioning and parental expectations of boys contribute to the development of assertiveness early in life—assertiveness which likely contributes to their less successful early school adjustment, but which finds increasing support in the school system as boys move upward through the grades.

One explanation of the initial male repudiation of academic excellence is that our society expects boys to assert their independence and girls to conform to certain limitations of decorum and tractability. A boy derives a sense of achievement from many things—physical strength, athletic skill,—that are not related to "book learning" or the classroom, and indeed the submission that is frequently required by teachers before they will give high grades is utterly repugnant to the masculine self-image.<sup>2</sup>

More men are available in secondary schools as role models who anticipate and reward male assertiveness. Intramural, intercholastic sports and extra-curricular activities provide additional opportunities for males to participate and develop as individuals within a group. The male student who finds little teacher support for his growth and independence seeks solace from his peers or alternatives outside the system. For some youth, part-time jobs may be an alternative. For others, the only alternative is to "drop out". Masculine aggression, which is suppressed at the elementary level, may be the very characteristic which contributes most to success in post-secondary education and later on the job.

<sup>1</sup> Kenneth A. Simon and W. Nance Grant, Digest of Educational Statistics, 1972 Edition, National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1973, p. 56.

<sup>2</sup> Irene H. Impelligerre, "Nature and Scope of the Problem," Guidance for the Underachiever with Superior Ability, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1961, pp. 11-12.

Females, on the other hand, progress successfully through the public school system up through junior high school and are rewarded for their passivity to teacher demands. Girls achieve via conformity. Yet, all the while they are achieving in school, their feelings about themselves and their own sex are becoming more negative. More females graduate than males, but fewer of them continue their education. "The intellectual, high achieving girl who is educationally motivated through the early school years has little in the way of cultural expectation to sustain her motivation into adulthood."<sup>3</sup>

The docility, passivity, and conformity which were rewarded by teachers in the school system also may contribute psychologically to the lower self-esteem, the lesser creativity and independence, and the lower status of women in the job market. The role of school staff in potential impact upon the growth and development of individual learners is second only to the role of the home. Children whose homes do not provide the nurture and support for optimal growth are dependent upon the schools to provide it.

#### PUBLIC SCHOOL STAFF

Our public schools are predominately female in numbers of girls enrolled and in numbers of staff employed. Table 26 shows the distribution of professional personnel within our public schools for 1972-73.

While 66.4 percent of the teaching staff are female, nowhere are women in the majority of power positions, and the higher the grade level, the fewer the women. While statistics are unavailable on the sex distribution of instructional staff in vocational schools, women seldom are encountered in technical fields other than health occupations, office occupations, food service, or textile technologies. Principals of most schools are male. As the number of female teachers and school administrators decreases in the higher grade levels, so does the self-image of female students. Yet, existing female staffs, with proper training, are in a strong position to encourage independence, curiosity, creativity, and assertiveness in both male and female students at an early age. While the school system currently rewards conformity, the economic and social system rewards assertiveness. And therein lies one dichotomy.

#### TEACHERS IN VOCATIONAL-TECHNICAL EDUCATION

The number of teachers in Vocational Education in 1972 was 235,658. Of this total, 52 percent were in secondary education, 22 percent were in post-secondary education, and 26 percent were in adult education. Unfortunately, the number of women teachers, broken down by program area, is unknown. However, it is likely that the majority of female instructors are in those vocational areas which have predominantly female enrollments.

<sup>3</sup>

Ibid.

TABLE 26  
Staff Survey of Public School Professional Personnel  
1972-73

Position	Numbers of Persons Total	Women	Percentage Total	Distribution Women
<b>INSTRUCTIONAL STAFF</b>				
Teachers . . . . .	2,110,368	1,401,284	100.0	66.4
Principals . . . . .				
Elementary (including Teaching Principals) . . . . .	48,196	9,446	100.0	19.6
Junior high . . . . .	9,374	272	100.0	2.9
Senior high . . . . .	15,827	222	100.0	1.4
Total principals . . . . .	63,397	9,940	100.0	15.5
Assistant principals . . . . .				
Elementary . . . . .	6,483	1,997	100.0	30.8
Junior high . . . . .	7,817	594	100.0	7.6
Senior high . . . . .	13,289	850	100.0	6.4
Total assistant principals . . . . .	27,589	3,441	100.0	12.5
Other instructional staff . . . . .				
School librarians . . . . .	40,540	37,216	100.0	91.8
Counselors . . . . .	49,770	23,392	100.0	47.0
School nurses . . . . .	17,074	16,835	100.0	98.6
Other . . . . .	33,631	16,879	100.0	50.1
Total other instructional staff . . . . .	2,382,478	1,508,987	100.0	64.1

Source: Research Report, 1973, R-5, Twenty-fifth Biennial Salary and Staff Survey of Public School Professional Personnel, National Education Association, 1972-73, p. 9.

Table 27 compares the enrollments in Vocational Education programs by sex and the distribution of teachers in 1972.

This table indicates that the three Vocational Education programs in which girls are concentrated--health, home economics, and office--make up 53 percent of the total enrollment in Vocational Education. Teachers assigned to those programs comprise only 48.5 percent of the total teachers in Vocational Education. These are the programs in which women teachers are likely to abound. The situation is particularly acute in home economics, where 30 percent of the total enrollment are instructed by 18.5 percent of the teachers; in contrast, in trade and industrial 21 percent of the enrollment are taught by 29 percent of the total staff. Consequently, as was discussed in Chapter II, girls are concentrated heavily in classes where they may have less opportunity for instructional time from the teacher. Conversely, according to these gross estimates, women teachers are likely to be assigned to classes with higher pupil/teacher ratios. Thus, secondary Vocational Education schools customarily discriminate against both female students and female teachers.

#### VOCATIONAL COUNSELING IN THE PUBLIC SCHOOLS

While the family is the strongest influence on the occupational choice of a student, it would seem that the school would be in the secondary position by virtue of the great amount of time students spend in class. A study of occupational aspirations of high school youth completed at Louisiana State University confirmed that parents are the decisive influence. However, in view of the increasing numbers of single-parent families, most of them headed by women, and the number of families with no employed adults, the importance of the secondary school and the vocational school, particularly as a motivator of occupational choice, cannot be emphasized too strongly. Table 28 summarizes the study of occupational choices.

Girls ranked mother first and father fourth, with "person in occupation" and friend preceeding father as major influences on their occupational choice. Boys, on the other hand, ranked father first and mother second. It should be noted that of all school personnel the guidance counselor is in the strongest position to influence student job choice. However, both friend and "person in an occupation" rank higher.

To date, the impact of the public school counselors in helping students in selecting vocational-technical programs or in setting occupational goals has been second-rate. While many explanations for this situation are possible, two will be explored here.

Counselors tend to reflect the biases of society. Just as our society has been both sexist and racist toward women and minorities, it also has perpetuated class distinctions and a caste system. An elitist philosophy continues to permeate both home and school. White-collar jobs have more status than blue-collar jobs. Intellect is more valued than manual skills. Academic education has far more prestige than vocational training. Despite increasing wages for skilled craftworkers and technicians, despite increasing evidence of the failure of the academic program

TABLE 27  
Enrollments in Vocational Education Program by Sex  
and the Distribution of Teachers, 1972

Program	Total	% Total	% Female	% Male	Total Teachers	Teacher % of Total
Agriculture	896,460	7.7	5.4	94.6	13,270	5.9
Distribution	640,423	5.5	45.3	54.7	13,795	6.2
Health	336,652	2.9	84.7	15.3	14,552	6.5
Home Economics	3,445,698	29.7	91.6	8.4	41,547	18.5
Office	2,351,878	20.3	76.4	23.6	52,662	23.5
Technical	337,069	2.9	9.8	90.2	16,820	7.5
Trades & Industrial	2,397,968	20.7	11.7	88.3	65,105	29.1
Other	1,304,619	11.2	44.7	55.3	6,369	2.8

Source: Division of Vocational and Technical Education, Trends in Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, June, 1973, p. 23.

Division of Vocational and Technical Education, Summary Data Vocational Education Fiscal Year 1972, Washington: Office of Education, Department of Health, Education, and Welfare, May, 1973, pp. 12-17.

TABLE 28

Students Responses of Persons Influencing  
Their Occupational Choices

	Boys		Girls	
	Number	Percent	Number	Percent
	N-5,810		N-6,200	
Mother	2,813	48.6	3,807	61.7
Father	3,080	53.2	2,832	45.9
Brother or sister	1,801	31.1	2,200	35.6
Grandparent	1,412	24.4	1,578	25.6
Other relative	2,138	36.9	2,559	41.4
Friend	2,396	41.4	3,155	51.1
Person in occupation	2,613	45.1	2,973	48.1
Clergyman	524	9.1	424	6.9
Coach	1,042	18.0	594	9.6
Principals	860	14.9	826	13.4
Academic teachers	952	16.4	1,165	18.9
Vocational agriculture teacher	922	15.9	284	4.6
Vocational home economics teacher	387	6.7	1,156	18.7
Distributive education teacher	541	9.3	442	7.2
Business education teacher	777	13.4	1,363	22.1
Trade & industrial education teacher	665	11.5	305	4.9
Industrial arts teacher	924	16.0	300	4.9
Guidance counselor	1,232	21.3	1,518	24.6
Other	2,251	38.9	2,783	45.1

Source: C.L. Mondart, Sr. and Others, "Educational and Occupational Aspirations and Expectations of High School Youth," Baton Rouge: Louisiana State University, Department of Vocational Agricultural Education, 1970.

to meet the needs of many youth, and despite the decline of enrollments in our Nation's colleges and universities at a time when demographers had projected that enrollment would be peaking, schools perpetuate elitist values.

One study of 400 students in an urban high school supports the hypothesis that guidance counselors are more effective in academic rather than vocational counseling. They are providing much more assistance in college and university planning than they are expanding student awareness of multiple job opportunities and being helpful in occupational goal-setting.<sup>4</sup>

A simultaneous problem existing among many counselors today is that their performance is inhibited by sex bias. They not only lack adequate knowledge and information about current and future jobs and the world of work, but also continue to limit girls' awareness of the entire range of job options. Yet, even if counselors were to treat each student according to individual ability rather than sex, current school policies may deny girls the opportunity to elect heretofore male-intensive classes. As recently as 1972, girls were a majority in 38 wage-earning courses out of the 136 OE instructional programs. Counselors are either unaware of the need for desegregating classes or are not providing girls with enough encouragement to consider "male" occupations as appropriate choices.

One of the techniques used to motivate students in occupational goal-setting is the vocational interest questionnaire. These questionnaires purport to compare students' current academic and outside interests and preferences with the interests and preferences of practitioners and employees in specific occupations. Yet, the Strong Vocational Interest Blank, designed especially for and administered separately to each sex, perpetuated stereotyped notion about "appropriate" activities, behaviors, and jobs and served to steer young women--and men--into traditional occupations. Fortunately, this test, which has been popular for many years, recently has been revised; the use of sex-biased tests specifically is prohibited in new HEW guidelines.

Female counselors are in an especially favorable position to encourage developing ambitions among female students. However, many counselors still reinforce the social conventions which prevent many young women from realizing their full potential. They have failed to broaden girls' occupational interests, encourage their exploration of a total range of jobs--or help girls plan in terms of lifelong careers. If present practices continue, there may be little change among females in electing diverse educational and training programs leading to nontraditional, higher paying jobs.

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<sup>4</sup> Joseph L. Thorne, "The Relationship of the Job Market and Motivational Factors on the Career Goals and/or Job Choices of Flint High School Seniors," Unpublished Doctoral Dissertation, University of Michigan, 1974, p. 18.

### WOMEN IN ADMINISTRATION

The status of women in public school administration has been mentioned earlier. While the total instructional staff in public schools was 66 percent female in 1972-73, only 20 percent of the elementary principals, three percent of the junior high school principals, and 1.4 percent of all high school principals were women. (See Table 26, page 101.) The scarcity of women in central office administration is even more dramatic. Women in middle management positions comprised 26 percent of the staff, but again, the higher in the hierarchy, the fewer the women. Women represent less than 11 percent of the executive staff of the public schools and only 0.01 percent of the superintendents. While school administrative staff and college professors actively encourage people to apply for administrative jobs, they evidently do not direct their efforts toward females. In a 1974 survey of key women teachers in Michigan, only one woman educator among some 500 expressed an interest in becoming a superintendent of schools.<sup>5</sup> The lack of female role models continues to deter female students from seeking graduate degrees in any phase of public school administration, including vocational-technical administration.

Of the staff in colleges and universities preparing teachers and administrators, only 19 percent of the faculty were women, although women are in greatest proportion in the smaller, less prestigious institutions. Women are 16.8 percent of the faculty in all universities and 23.5 percent of the teaching staff in all colleges.<sup>6</sup> Table 29 illustrates the placement of women by rank within both colleges and universities for 1971-72.

In higher education, according to a survey conducted by the American Association of University Women, women are under-represented in top level faculty positions, in influential offices, and in top level administrative positions. They are unlikely to be presidents, vice presidents, or directors of development, despite the claim of 90 percent of the institutions surveyed that women are included in policy positions. Women in administration are most likely to be head librarians, directors of placement or financial aid. There was an average of 2.6 female department chairmen at the colleges

<sup>5</sup> Eileen Foley, "State's Women Educators Fare Poorly," Detroit Free Press, July 7, 1974, p. 5.

<sup>6</sup> The Status of Women Faculty and Administrators in Higher Education Institutions, 1971-72, NEA Research Memo, Washington: National Education Association, April, 1973, p. 1.

TABLE 29

Percent of Women Faculty at Colleges  
and Universities: 1971-72

Faculty Rank	Universities	Colleges
All ranks	16.8	23.5
Professor	6.9	13.4
Associate Professor	12.5	19.1
Assistant Professor	18.5	24.8
Instructor	39.3	39.6
Lecturer	36.7	39.6

Source: The Status of Women Faculty and Administrators in Higher Education Institutions, 1971-72, NEA Research Memo, Washington: National Education Association, April 1973, p. 2.

in the survey. Twenty-one percent had no women trustees and 25 percent had only one. Thirty-five percent did not hire both husbands and wives for faculty posts.

Women administrators currently complain that women are powerless puppets in many instances:

... many women are being put into adjunct or assistant posts to satisfy affirmative action rules. When they have been switched from secretary to administrative assistant with no power, there is a built-in capacity for failure.

Thus, many female college administrators are isolated from the power base and kept from real responsibility.

While the Carnegie Commission on Higher Education predicted an increase of women and minorities in faculty positions over the next 20 years, they are unlikely to increase in numbers paralleling their participation rate of 38 percent and 15 percent, respectively, in the 1970 labor force, according to the Commission. If colleges and universities hire 35 percent female faculty members in the 1970s, women will increase to 28 percent of faculty by 1980. If 45 percent of the new-hires are women in the 1980s, women will comprise close to 30 percent of the faculty by 1990.<sup>9</sup>

Of the 67 professional organizations with units devoted to the status of women in their profession, only three are related to Vocational-Technical Education, namely, the American Personnel and Guidance Association, National Association for Women Deans, Administrators and Counselors, and the National Vocational Guidance Association.<sup>10</sup> Women in administration are scarce in public school systems, in executive office positions, and almost nonexistent

<sup>7</sup> Susan B. Kaufman, "Few Women Get Positions of Power in Academe, Survey Discloses," The Chronicle of Higher Education, November 30, 1970, pp. 1 and 4.

<sup>8</sup> "Women Administrators Seek Way Out of Isolation," The Chronicle of Higher Education, November 5, 1973, p. 5.

<sup>9</sup> "Pace Seen Slow for Women and Minorities in Gaining Places on Nation's Faculties," The Chronicle of Higher Education, October 9, 1973, p. 1.

<sup>10</sup> "Women's Units in 67 Organizations," The Chronicle of Higher Education, October 29, 1973, p. 9.

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<sup>7</sup> Susan B. Kaufman, "Few Women Get Positions of Power in Academe, Survey Discloses," The Chronicle of Higher Education, November 30, 1970, pp. 1 and 4.

<sup>8</sup> "Women Administrators Seek Way Out of Isolation," The Chronicle of Higher Education, November 5, 1973, p. 5.

<sup>9</sup> "Pace Seen Slow for Women and Minorities in Gaining Places on Nation's Faculties," The Chronicle of Higher Education, October 9, 1973, p. 1.

<sup>10</sup> "Women's Units in 67 Organizations," The Chronicle of Higher Education, October 29, 1973, p. 9.

in the superintendency. As for academic ranks, the female fifth of the faculty tends to hold the lowest ranking jobs and is less likely to have tenure than male colleagues. Those few administrative slots held by women on campuses are generally shut-off from any real opportunity to influence executive level decisions.

#### ENROLLMENTS OF WOMEN IN HIGHER EDUCATION

While 1,487,000 girls graduated from high school in 1972 compared with 1,457,000 boys, fewer girls enrolled in higher education than boys, despite the fact that 30,000 more girls were eligible.<sup>11</sup> In 1972, among all first time enrollments in community colleges and four-year higher education institutions, 791,000 girls and 947,000 boys were enrolled. Whereas the majority of high school graduates are girls, only about 45 percent of those enrolling for the first time in programs of higher education are girls.<sup>12</sup>

A recent report of the American Council on Education found that first-time female college students in 1971 were younger and more had graduated in the upper half of their high school class than the men, but fewer planned to complete four years of undergraduate education.<sup>13</sup> The total enrollment in institutions of higher education in the fall of 1971 was 8,948,644, 42 percent of whom were women.<sup>14</sup>

As for completions of programs of undergraduate education in the United States in 1970-71, 196,405 received associate degrees or other formal recognition for completing at least two years of higher education. Of this total, 85,163, or 44 percent, were women.<sup>15</sup> Of the 846,110 bachelor's degrees conferred by all four-year institutions in 1970-71, 367,687, or 43 percent, were granted to women.<sup>16</sup>

11

Simon and Grant, op. cit., p. 55.

12

Ibid., p. 76.

13

Ibid., p. 77.

14

Ibid., p. 68.

15

Mary Evans Hooper, Associate Degrees and Other Formal Awards Below the Baccalaureate, 1970-71, National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1973, p. 19.

16

Mary Evans Hooper, Earned Degrees Conferred, 1970-71, National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1973, p. 8.

At the graduate level in all four-year colleges and universities in the United States in 1970-71, women were awarded 40 percent of the 231,486 master's degrees. Of the doctoral degrees granted, women received only 14 percent. Of the total aggregation of degrees granted in 1970-71, master's degrees conferred upon women accounted for eight percent of the total and doctoral degrees granted to women accounted for 0.4 percent. The comparison holds true again, the higher the level of education completed, the fewer the women.

#### Enrollment of Women in Discipline Divisions 1970-71

Education as a discipline grants more degrees than any other division of higher education. Women dominated the total number of graduates by almost three to one, with 132,236 women and 45,402 men receiving bachelor's degrees.<sup>17</sup> Of all women receiving bachelor's degrees in 1970-71, 36 percent were concentrated in the field of education. They were a majority of the master's graduates in only six disciplines and received a majority of the doctorates in only one discipline--home economics. It appears that college-educated women are more confined by academic discipline than by the limited number of occupations in which they are clustered.

#### Education as a Discipline

Education has the largest student enrollment of any college discipline, as shown earlier, and women make up three-fourths of the undergraduate enrollments. Table 31 breaks out the total enrollments by sex in the 44 divisions within education.

In 1970-71, undergraduate women were dispersed widely throughout all divisions except agricultural education and industrial arts. Of the students who received master's degrees, women again were dispersed widely except in the above-mentioned Vocational Education areas. At the doctoral level, women received a majority of the degrees conferred in only three divisions--pre-elementary education, home economics education, and nursing education. In the four divisions in which only two or four degrees were conferred, half were granted to women: junior high school education (one woman); education of the deaf (two women); education of the visually handicapped (one woman); and driver and safety education (one woman).

#### Enrollments in Vocational Education

How does the concentration of women in graduate programs affect women in Vocational Education? Since female enrollments decrease at the graduate level, women educators as a group have fewer promotional opportunities, because a master's degree is almost a prerequisite for job advancement in the field. Five educational disciplines relate to Vocational-Technical Education. Women comprised 96 percent of master's degrees granted in nursing education; 90 percent in home economics; 60 percent in business,

<sup>17</sup>  
Ibid., p. 175.

TABLE 30  
Enrollment of Women in Discipline Divisions by Number and Percent  
of Bachelors, Masters', and Doctor's Degrees, 1970-71

Discipline	Bachelor's Degree %			Master's Degree %			Doctor's Degree %		
	Total	Women	Women %	Total	Women	Women %	Total	Women	Women %
Agricultural Natural Resources	12,710	539	4.2	2,458	144	5.9	1,086	31	2.8
Agricultural and Environmental Design	5,549	667	11.9	1,724	243	14.1	36	3	8.3
Area Studies	2,430	1,322	54.9	1,017	397	39.0	149	26	17.4
Biological Sciences	36,033	10,571	29.3	5,756	1,943	33.7	3,645	595	16.3
Business & Management	116,709	10,803	9.2	26,654	1,045	3.9	810	23	2.8
Communications	10,802	3,813	35.3	1,856	642	34.6	145	19	13.1
Computer & Information Services	2,388	324	13.6	1,588	164	10.3	128	3	2.3
Education	177,638	132,236	74.4	89,067	50,020	56.1	6,398	1,335	21.2
Engineering	50,357	403	.8	16,457	185	1.1	3,638	23	.6
Fine & Applied Arts	30,447	18,169	59.7	6,678	3,165	47.4	621	138	22.2
Foreign Languages	20,433	15,285	74.8	4,779	3,126	65.4	781	297	38.0
Health Professions	25,484	19,680	77.2	5,902	3,272	55.4	466	77	16.5
Home Economics	11,271	10,970	97.3	1,453	1,365	93.9	123	75	61.0
Law	845	27	4.9	955	46	4.8	20	-	0
Letters	73,398	44,782	61.0	12,743	7,328	57.5	2,416	567	23.5
Library Science	1,013	932	92.0	7,028	5,713	81.3	39	11	28.2
Mathematics	24,918	9,494	38.1	5,201	1,524	29.3	1,199	93	7.7
Military Sciences	357	1	.3	2	0	0	-	-	-
Physical Sciences	21,549	3,014	14.0	6,306	853	13.3	4,391	246	5.6
Psychology	38,154	17,037	44.6	4,438	1,651	37.2	1,782	427	24.0
Public Affairs & Services	9,303	4,566	49.1	8,406	4,099	48.8	178	43	24.1
Social Services	156,698	57,918	37.0	16,522	4,710	28.5	3,659	507	13.8
Theology	3,744	1,017	27.2	22,710	661	2.4	312	6	1.9
Interdisciplinary Studies	14,084	4,117	29.2	1,706	600	35.2	91	14	15.4
Total	846,110	367,687	43.4	231,486	92,896	40.1	32,113	4,559	14.2

Source: Mary Evans Hooper, Earned Degrees Conferred, 1970-71, National Center for Education Statistics, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1973, p. 12.

TABLE 31

Bachelor's, Master's and Doctor's Degrees Conferred in Higher Education by Divisions  
within Education Discipline by Total, Women, and Percent Women: United States  
1970-71

Education Division	Bachelor's Degree			Master's Degree			Doctor's Degree		
	Total	Women	%	Total	Women	%	Total	Women	%
General Education	2,095	1,696	80.9	12,915	7,441	57.6	1,598	426	20.4
Elementary Education	90,960	82,722	90.9	17,079	13,952	81.7	219	83	37.9
Secondary Education	3,718	2,141	57.6	5,425	2,488	45.9	212	42	19.8
Juniors High School Educ.	721	461	63.9	134	67	50.0	2	1	50.0
Higher Education	6	0	0	308	163	52.9	274	41	15.0
Jr. & Com. College Educ.	1	0	0	91	36	39.6	6	1	16.7
Adult & Continuing Educ.	12	5	41.7	239	98	41.0	45	10	22.2
Special Education	2,320	1,979	85.3	3,051	2,206	72.3	114	37	32.5
Adm. of Special Educ.	--	--	--	106	66	62.3	9	3	33.3
Educ. of Mentally Retarded	2,640	2,265	85.8	935	668	71.4	18	5	27.8
Educ. of the Gifted	12	11	91.7	28	21	75.0	--	--	--
Educ. of the Deaf	239	228	95.4	208	168	80.8	4	2	50.0
Educ. of the Culturally Disadvantaged	3	2	66.7	115	61	53.0	--	--	--
Educ. of the Visually Handicapped	78	74	94.9	97	72	74.2	2	1	50.0
Speech Correction	2,358	2,074	87.9	572	494	86.4	40	10	25.0
Education of Emotionally Disturbed	347	291	83.9	378	287	75.9	14	5	35.7
Remedial Education	--	--	--	87	70	80.4	--	--	--
Special Learning Disabilities	125	116	92.8	179	142	79.3	2	--	--
Educ. of the Physically Handicapped	149	132	88.6	150	118	78.7	--	--	--
Educ. of the Multiple Handicapped	63	59	93.6	50	38	76.0	--	--	--
Social Foundations	180	70	38.9	534	230	43.1	129	31	24.0
Educational Psychology	315	114	36.2	1,286	674	52.4	362	88	24.3
Pre-Elementary Education	3,405	3,358	98.6	533	499	93.6	9	7	77.0
Educ. Statistics & Research	3	3	100	61	27	44.3	58	13	22.4
Educ. Testing, Evaluation & Measurement	--	--	--	222	116	52.2	30	6	20.0

TABLE 31 --Continued

Education Division	Bachelor's Degree			Master's Degree			Doctor's Degree		
	Total	Women	%	Total	Women	%	Total	Women	%
Student Personnel	7	4	57.1	13,414	6,800	50.7	556	115	20.9
Educational Administration	5	1	20.0	7,892	1,676	21.2	957	82	8.6
Educational Supervision	---	---	---	707	374	52.9	71	9	12.7
Curriculum & Instruction	296	215	72.6	2,261	1,374	60.8	458	117	25.5
Reading Education	9	8	88.9	2,802	2,497	89.1	61	30	49.2
Art Education	5,687	4,084	71.8	1,000	664	66.4	53	16	30.2
Music Education	7,283	4,212	57.8	1,564	727	46.5	109	14	12.8
Mathematics Education	2,217	1,139	51.4	782	353	45.1	49	15	30.5
Science Education	891	412	46.2	883	343	38.8	91	15	16.5
Physical Education	24,773	9,565	38.6	4,410	1,378	31.2	283	69	24.4
Driver & Safety Education	132	33	25.0	171	25	14.6	2	1	50.0
Health Education	1,089	642	58.9	405	206	50.9	51	8	15.7
Business, Commerce & Distributive Education	8,648	6,010	69.5	1,924	1,147	59.6	82	26	31.7
Industrial Arts, Vocational & Voc./Technical Educ.	7,109	108	1.5	2,098	111	5.3	106	6	5.7
Agricultural Education	1,405	14	1.0	450	21	4.7	43	1	2.3
Education of Exceptional Children	26	23	88.5	112	86	76.8	4	1	25.0
Home Economics Education	5,509	6,415	98.5	802	725	90.4	28	27	96.4
Nursing Education	603	590	97.8	330	317	96.1	28	27	96.4
Education, Other	1,199	960	80.1	2,276	994	43.7	219	43	19.6
Total	177,638	132,236	74.4	89,067	50,020	56.1	6,398	1,335	20.9

Source: Mary Evans Hooper, Earned Degrees Conferred, 1970-71, National Center for Education Statistics, Office of Education, Department of Health, Education, and Welfare, Washington: U.S. Government Printing Office, 1973, pp. 173-268.

commercial, and distributive education; five percent in industrial arts, Vocational, and Vocational-Technical Education; and less than five percent in agricultural education. Of the total enrollments in these five disciplines, women comprised 41 percent. At the doctoral level, women held only 87, or 30 percent, of the total degrees granted in all vocational-technical fields in 1970-71, a contributing factor to lesser opportunities for advancement of professional women in Vocational-Technical Education.

Male faculty in colleges of education are apparently unsuccessful or negligent in encouraging more women to continue their education through completion of the doctoral program. One only can conclude that restrictions in the number of women university faculty members result in a small number of female doctoral candidates, which, in turn, limits the number of women qualified for top posts. Universities have failed to produce enough female teachers and administrators to serve as role models who might encourage young women to seek degrees in more diversified areas of Vocational Education.

#### LEADERSHIP DEVELOPMENT

The Leadership Development Program for vocational educators resulted from the efforts of several organizations, including the Bureau of Adult, Vocational and Technical Education, the State Director's Association, and the American Vocational Association. Leadership Training Institutes provided staff development for Vocational Education personnel under Section 553 of Part F, Education Professions Development Act (EPDA) of 1968. Some Institute members provided additional leadership in the establishment of the Leadership Development Program under Section 552, Part F, EPDA in 1969.

The purpose of the three-year project was to afford vocational teachers the opportunity for graduate study in Vocational Education, related fields, and research and development. Graduate work could include internship experiences in State and local Vocational Education systems. It was anticipated that scholarship award winners would complete requirements for the degree of Doctor of Education or Philosophy. Thus, the long-term goal of the Leadership Development Program was to provide a group of highly trained people who could occupy positions of responsibility.

Eighteen universities in 18 states were selected as training centers for the EPDA fellows. They were as follows:

California -	University of California at Los Angeles
Colorado -	Colorado State University
Connecticut -	University of Connecticut
Georgia -	University of Georgia
Kentucky -	University of Kentucky
Michigan -	Michigan State University
Minnesota -	University of Minnesota
New Jersey -	Rutgers University
North Carolina -	North Carolina State University
Ohio -	Ohio State University
Oklahoma -	Oklahoma State University

Oregon -  
 Pennsylvania -  
 Tennessee -  
 Texas -

Oregon State University  
 Temple University  
 University of Tennessee  
 Texas A & M University

Guidelines for the program included the establishment of an advisory committee on each campus to increase staff awareness of the program, to chart new directions, to evaluate the program, to assist in evaluating the doctoral program, and generally to disseminate program-related information. Summary reports of the graduate fellowship programs in Vocational-Technical Education prepared by 14 of the 18 universities provided the basic information for dissemination.

All of the 18 project directors for the Leadership Development Program were men. Ten staff members assisted the project directors. Of these, two were women serving as assistant directors. Nine of the fourteen summary reports listed advisory committees or staff involved in the project. Of 107 faculty or advisory committee members listed, only 17 were women.

In addition to the federally supported fellowship awards, 40 additional awards were provided by the States. A total of 334 graduate students were enrolled in the Leadership Development Program. Of these, 209 were males and 129, or 39 percent, were females. Of the total, 27 were black, five were of Mexican descent, and five were "other" minorities. Students ranged in age from 21 to 52. One hundred twenty had completed doctorates as of November 1973. Fellows were distributed broadly in every Vocational Education specialty area.<sup>18</sup> Unfortunately, few of the women in the program were able to benefit from the advice or example of women in leadership roles.

#### WOMEN AS LEADERS IN VOCATIONAL EDUCATION

During 1973-74, only one woman was a chief state school officer, Dolores Calberg, of Helena, Montana. There are no women among the State directors of Vocational Education at present. Six (12 percent) of the chairpersons of the State advisory councils for the 50 States and two of the executive directors are women.

The total current membership for the 56 State Advisory Councils for Vocational Education (including American Samoa, Guam, Puerto Rico, Virgin Islands, Washington, D.C., and Trust Territory of the Pacific Islands) is 1,180, with a range of membership from a low of 12 to a high of 44 and an

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Interview with Frank L. Perazzoli, Education Specialist, Vocational Education Personnel, Office of Education, Department of Health, Education, and Welfare, Washington, D.C., February 28, 1974.

average of 21 members. Advisory councils have the following representation: 28 percent from business and industry; 25 percent from State education agencies; 12 percent from labor; nine percent, organizations; four percent, teaching staff; and two percent are students. Women constitute 13.7 percent of the total membership. Six councils have no women and others have from one to eight.<sup>19</sup> Of the 22-member National Advisory Council on Vocational Education, four are women.

Women as a major force serving on boards of education have remained rather constant for 50 years. Women school board members are 10.1 percent of the current total; in 1922, the percentage was 10.5. Of that number, a slightly higher percentage of women had graduated from high school and had completed more education than male members. Yet, there is a commonly held view that too many women on the board is undesirable. The Northeast region of the United States has the highest percentage of women at 17.2 percent; the Pacific region has 16.4 percent; the Midwest has 9.8 percent women; the South, 9.6 percent; and the West, 8.6 percent.<sup>20</sup>

Of the 52 presidents of State boards of education (includes American Samoa, Guam, and Puerto Rico; Illinois has no State board) four percent are women. Thus, despite the pressure from women's organizations and Federal legislation to protect equal education and employment opportunities for women, the majority sex continues to be a very small minority on the major decision-making boards in education. Custom is likely to prevail, unless women organize their resources for inclusion among the top educational policy makers.

#### SUMMARY

Personnel throughout public education perpetuate sexism in many ways: by reflecting the bias of the society they serve, by offering inadequate vocational and career counseling, and by providing powerless female role models for young women. Teachers continue to breed conformity when social and economic success requires independence. Secondary counselors are more effective in academic than in vocational counseling and fail to provide girls with ample knowledge about careers and the wide range of jobs available in the world of work. While there is a preponderance of women teachers

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"State Advisory Councils for Vocational Education, Fiscal Year 1974;" Mimeographed report, Washington: Division of Vocational and Technical Education, Office of Education, Department of Health, Education, and Welfare, February 26, 1974, p. 1.

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"NSEA Study Shows School Board Quota System Discriminates Against Women," The School Administrator, May, 1974, p. 5.

in elementary schools, the higher the educational level, the fewer the women both in the classroom and in administrative positions. The few women who become principals are concentrated at the elementary level. Female teacher educators hold the lowest ranks in higher education. Thus, schools convince girls in a variety of ways that it's a man's world, and women have been rather ineffectual in doing much about it.

While women are 54 percent of the undergraduates in the five areas related to Vocational Education, they receive only 30 percent of the doctorates, mainly in home economics and nursing education. The EPDA program for leadership development in Vocational Education had a 39 percent female graduate enrollment. However, there were no female project directors, and only 16 percent of the advisory committee members were women.

Women are not represented in elective or appointive decision-making roles at the State or National level. There are no female State directors of Vocational Education. Only two of the 50 executive directors of State advisory councils, six of the 50 chairpersons of State councils, and only four of the 22-member National Advisory Council on Vocational Education are women. Vocational-Technical Education is surely a male dominated profession.

## REFERENCES

Blitz, Rudolph C. "Women in the Professions; 1970-1970." Monthly Labor Review. May, 1974.

Division of Vocational and Technical Education. Summary Data Vocational Education Fiscal Year 1972. Washington: Office of Education, Department of Health, Education, and Welfare. May, 1973.

Division of Vocational and Technical Education. Trends in Vocational Education Fiscal Year 1972. Washington: Office of Education, Department of Health, Education, and Welfare. June, 1973.

Foley, Eileen. "State's Women Educators Fare Poorly." Detroit Free Press. July 7, 1974.

Hooper, Mary Evans. Associate Degrees and Other Formal Awards Below the Baccalaureate, 1970-71. National Center for Educational Statistics. Office of Education, Department of Health, Education, and Welfare. Washington: U.S. Government Printing Office. 1973.

Hooper, Mary Evans. Earned Degrees Conferred, 1970-71. National Center for Educational Statistics. Office of Education, Department of Health, Education, and Welfare. Washington: U.S. Government Printing Office. 1973.

Impelligerre, Irene H. "Nature and Scope of the Problem." Guidance for the Underachiever with Superior Ability. Office of Education, Department of Health, Education, and Welfare. Washington: U.S. Government Printing Office. 1961.

Kaufman, Susan B. "Few Women Get Positions of Power in Academic, Survey Discloses." The Chronicle of Higher Education. November 30, 1970.

Mondart, G. L., Sr. and Others. "Educational and Occupational Aspirations and Expectations of High School Youth." Baton Rouge: Louisiana State University, Department of Vocational Agricultural Education. 1970.

"NSBA Study Shows School Board Quota System Discriminates Against Women." The School Administrator. May, 1974.

"Pace Seen Slow for Women and Minorities in Gaining Places on Nation's Faculties." The Chronicle of Higher Education. October 9, 1973.

Parrish, John B. "Women in Professional Training." Monthly Labor Review. May, 1974.

Research Report, 1973-R-5. Twenty-sixth Biennial Salary and Staff Survey of Public School Professional Personnel. Washington: National Education Association. 1972-73.

Simon, Kenneth A. and W. Nance Grant. Digest of Educational Statistics, 1972 Edition. National Center for Educational Statistics. Office of Education, Department of Health, Education, and Welfare. Washington: U.S. Government Printing Office. 1973.

"State Advisory Councils for Vocational Education, Fiscal Year 1974." Mimeographed report. Washington: Division of Vocational and Technical Education. Office of Education, Department of Health, Education, and Welfare. February 26, 1974.

The Status of Women Faculty and Administrators in Higher Education Institutions, 1971-72. NEA Research Memo. Washington: National Education Association. April 1973.

Thorne, Joseph L. "The Relationship of the Job Market and Motivational Factors on the Career Goals and/or Job Choices of Flint High School Seniors." Unpublished Doctoral Dissertation. University of Michigan. 1974.

"Women Administrators Seek Way Out of Isolation." The Chronicle of Higher Education. November 5, 1973.

"Women's Units in 67 Organizations." The Chronicle of Higher Education. October 29, 1973.

# AFFIRMATIVE ACTION FOR WOMEN IN EDUCATION AND EMPLOYMENT

Equal opportunity for female students and educators in Vocational-Technical Education has not been realized. This social injustice, with all of its ramifications, has been the subject of this report. The question now must be raised: What can be done to change pervasive discrimination against females throughout the Vocational Education system? Legal protection against sex discrimination, classified as "Affirmative Action," will be reviewed briefly as it affects girls and women in education and employment.

During the decade from 1962-1972, several laws were passed and Executive Orders issued to eliminate sex discrimination against women in employment and education. The first of these laws was the Equal Pay Act of 1963. The Civil Rights Act of 1964, Title VI and Title VII, was followed by the Age Discrimination Act of 1967. Executive Order 11246 was issued in 1965, and it was revised by President Nixon in 1971 by Executive Order 11375.

The most recent legislation amending the Fair Labor Standards Act of 1938 and Title VII was the Equal Employment Opportunity Act of 1972. Title IX of the 1972 Education Amendment to the Higher Education Act prohibits sex discrimination against students. Finally, Title VII (Section 799A) and Title VIII (Section 845) of the Public Health Service Act prohibit sex discrimination in employment and in student admissions in federally supported health training programs.

## THE EQUAL PAY ACT OF 1963

The Equal Pay Act, an amendment to the Fair Labor Standards Act, resulted from the efforts of women's organizations, unions, and other interest groups. This act prohibits sex discrimination in the payment of wages for equal work on jobs requiring similar skills and responsibility and performed under similar working conditions. Equal pay for equal work also covers overtime and fringe benefits. In addition, the law prohibits employers from reducing the wages of any employee in an effort to equalize rates between the sexes. It also prohibits labor unions from causing an employer to discriminate against an employee by violating the equal pay provision.

The Equal Pay Act authorizes three methods for the recovery of back wages, if litigation is pursued. First, the Secretary of Labor may bring suit upon the written request of any employee. An employee may sue for back wages and an additional sum to cover legal fees and court costs. Or the Secretary of Labor may obtain an injunction to restrain any person from violating the law, including unlawful holding of proper wages.

The Equal Pay Act prohibits the following kinds of gross discrimination against women:

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Gloria Johnson, "Laws on Equal Education and Employment Opportunities for Women," Speech, Regional Seminar/Workshop on Women in the World of Work, Technical Education Research Centers, October, 1973, pp. 4-5.

- Denial of salary premiums to female teachers who coach teams
- Unequal fringe benefits
- Unequal salary scales for men and women researchers and administrators in colleges and universities
- Unequal entry salary for women college graduates hired for research, personnel, and administrative positions in institutions of higher learning
- Hiring only women at lower wage rates for jobs which may be performed by both sexes
- Paying lower salaries to women by claiming higher costs because of certain fringe benefits.

The Equal Pay Act does not prohibit wage differentials based upon seniority systems, merit systems, or wage systems which measure earnings by quality or quantity of production.

The advantages to women of this act are these:

1. The act does not compete for attention regarding enforcement on the basis of race, color, religion, or National origin.
2. Complaint procedures are very informal. The Wage and Hour Division of the Labor Department will investigate any institution or company on the basis of a letter or telephone call or anonymous tip.
3. Complaints are treated in strict confidence and the name of the aggrieved worker does not have to be revealed, unless litigation becomes necessary.
4. Persuasion, mediation, and voluntary compliance are preferred to court suits and have been obtained in about 95 percent of the investigations.

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<sup>2</sup> "Dushane Fund Reports." Washington: National Education Association, August 23, 1972, pp. 4-5.

<sup>3</sup> Johnson, *op. cit.*, p. 5.

- Denial of salary premiums to female teachers who coach teams
- Unequal fringe benefits
- Unequal salary scales for men and women researchers and administrators in colleges and universities
- Unequal entry salary for women college graduates hired for research, personnel, and administrative positions in institutions of higher learning
- Hiring only women at lower wage rates for jobs which may be performed by both sexes
- Paying lower salaries to women by claiming higher costs because of certain fringe benefits.<sup>2</sup>

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<sup>2</sup> "Dushane Fund Reports." Washington: National Education Association, August 23, 1972, pp. 4-5.

<sup>3</sup> Johnson, op. cit., p. 5.

Since the Law went into effect in 1964, \$65,600,000 has been paid as settlement for underpayment to 142,000 employees, mostly women. Many of the Labor Department's suits under the Equal Pay Act have gained considerable attention. Yet, despite this protection, "Sex Discrimination Against the American Working Woman," a study by the Institute for Social Research, University of Michigan, reports:

The average woman should have received 71 percent more than her current income to make her income equivalent to a man with the same scores on the achievement variables.<sup>5</sup>

On July 1, 1972, the Equal Pay Act was extended to executive, administrative, and professional employees and to outside sales personnel previously exempted. All employees of public and private educational institutions as well as non-supervisory and non-managerial employees in other organizations and industries now are protected under the law.<sup>5</sup> Under the Education Amendments of 1972 coverage was extended to professional employees such as personnel directors, counselors, attorneys, physicians, engineers, pharmacists, chemists, technicians, programmers, systems analysts, editors, and writers. Carin A. Clauss, Associate Solicitor in the Department of Labor, suggests, however:

The biggest issue in the next year will probably be in the educational institutions. We know this is an area of mass violations.<sup>6</sup>

#### THE CIVIL RIGHTS ACT OF 1964

Title VI of the Civil Rights Act of 1964 prohibits discrimination by race, color, or National origin in educational programs receiving Federal funds. This legislation covers students and others. It is administered by the Office for Civil Rights, U.S. Department of Health, Education, and Welfare.<sup>7</sup>

<sup>4</sup>  
Ibid., P. 6.

<sup>5</sup>  
Women's Bureau, "Brief Highlights on Major Federal Laws and Orders on Sex Discrimination," Washington: Women's Bureau, Employment Standards Administration, Department of Labor, June, 1973, p. 1.

<sup>6</sup>  
Ibid., p. 6.

<sup>7</sup>  
What is Affirmative Action? Washington: National Education Association, 1973, p. 10.

Title VII of the Civil Rights Act as amended by the Equal Employment Opportunity Act of 1972 forbids discrimination on the basis of race, color, religion, National origin, or sex in all aspects of employment by employers of 15 or more workers, by public and private employment agencies, and by public and private educational institutions. Excluded from the list of employers are Federal and District of Columbia agencies, Federal corporations, Indian tribes, State and local elected officials and their personal staff, and policy-making appointees. Religious educational institutions or associations are exempted with respect to the employment of individuals of a particular religion.<sup>8</sup>

The act specifically prohibits discrimination in hiring or firing; wages; fringe benefits; classifying, referring, assigning, or promoting employees; extending or assigning use of facilities; training, retraining, or apprenticeships; or any other terms, conditions, or privileges of employment.<sup>9</sup> This includes work assignments; sick leave, vacation, and overtime; insurance and health benefits; retirement; and advertising jobs by sex.

The following guidelines were added in 1972:

- Discrimination against married women
- Employment policies related to pregnancy and childbirth. Job applicants cannot be excluded because of pregnancy. Nor can women further be denied temporary leaves of absence designed for illness and accidents when the leave is for childbirth. They also must be guaranteed job reinstatement or accrued seniority rights.<sup>10</sup>

Charges may not be filed by women's rights organizations and others on behalf of aggrieved persons. However, the Equal Employment Opportunity Commission was given the power to institute lawsuits in Federal district courts in 1972. The Commission has developed a tracking system to determine priorities in the selection of companies and unions for litigation. All charges are grouped into four tracks. Tracks one and two designate large employers with National or regional operations and tracks three and four comprise all other respondents. Among the more famous suits settled was American Telephone and Telegraph, which was required to pay \$15 million in back wages to women and minorities and grant annual wage increases totaling \$38 million. Four other major companies, along with related unions, became targets for investigation: General Electric Company, General Motors

<sup>8</sup> Women's Bureau, op. cit., p. 8.

<sup>9</sup> Ibid.

<sup>10</sup> Johnson, op. cit., p. 12.

Corporation, Ford Motor Company, and Sears, Roebuck and Company. In a lawsuit against the Cleveland Board of Education, the Sixth Circuit Court supported the constitutional right of a teacher to teach classes during pregnancy as long as it is determined medically that she is able, and to return to teaching as soon after childbirth as she is recovered and able.<sup>11</sup>

#### AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967

The Age Discrimination Act guarantees the employment of the older worker on the basis of ability to perform the job. The legislation affects industries in interstate commerce, employment agencies serving these employers, and labor organizations whose members are in industries affecting interstate commerce. The act protects employees 40 to 65 years of age from discrimination. Since many women remain at home until the last child is through school, they may not enter the work force until their late 40s. The act is particularly relevant to this group of women.

#### EXECUTIVE ORDER 11246

The late President John F. Kennedy signed Executive Order 11246, which became law September 24, 1965, requiring that all government contracts include provisions that the contractor will not discriminate against any applicant or employee because of race, color, religion, or national origin. Every institution which is awarded a Federal contract of \$10,000 or more must agree not to discriminate. Each contractor employing more than 50 persons and whose contracts total \$50,000 must have a written affirmative action program on file.

#### Affirmative Action

An affirmative action program is a set of specific and result-oriented procedures to which a contractor commits himself to apply every good faith effort. The objective of those procedures and efforts is equal employment opportunity.<sup>12</sup>

Affirmative action programs for women received additional impetus through Executive Order 11375, signed by President Nixon on April 26, 1971 to put an end to discrimination against women. The Order reads:

<sup>11</sup>  
Ibid., pp. 9 and 12.

<sup>12</sup>  
Rosalind Loring and Theodora Wells, Breakthrough: Women into Management, New York: Van Nostrand Reinhold Company, 1972, p. 179.

To this end, I am now directing that you take the following actions:

- Develop and put into action a plan for attracting more qualified women to top appointive positions . . .
- Develop and put into action a plan for significantly increasing the number of women . . . in mid-level positions . . . This plan should directly involve your top personnel official.
- Ensure that substantial numbers of vacancies on your Advisory Boards and committees are filled with well-qualified women.
- Designate an overall coordinator who will be held responsible for the success of this project . . . <sup>13</sup>

The Department of Labor has the responsibility for enforcing these orders. Their Office of Federal Contract Compliance has spread the responsibility for monitoring to 15 other agencies which grant government contracts. The Compliance Office issued "Sex Discrimination Guidelines" and required affirmative action goals and timetables for increasing the numbers of women in job categories in which they are under-represented. The guidelines state that contractors may not advertise under male and female classifications; base seniority lists on sex; deny a job because of "protective" labor laws; distinguish between married and unmarried persons inequitably; or penalize women employees who require leave for childbearing. A leave of absence for childbearing must be guaranteed along with job reinstatement at the woman's former position and pay level without loss of service credit. <sup>14</sup>

As of December 4, 1971, Revised Order No. 4 required goals and timetables for women as well as minorities, and contractors were given 120 days to change their existing affirmative action plans. Among the conditions defined are the following:

1. Federal contractors or subcontractors must develop acceptable affirmative action programs for recruiting and utilizing women in all segments and at all levels of employment where deficiencies exist. The penalty is contract cancellation and disbarment from future contracts.
2. The contractor must give special attention to setting goals which will utilize women as officials and managers, professionals, technicians, sales workers, and craftsmen.

<sup>13</sup> Betty E. Sinowitz, "New Legal Remedies for Women," Today's Education, December, 1972, p. 3.

<sup>14</sup> Women's Bureau, op. cit., p. 3.

3. Underutilization of women or minorities in a job classification is expressly discouraged.
4. Contractors must encourage child care programs, which improve employment opportunities for women and minorities.
5. Contractors must initiate necessary remedial, job training, and work-study programs.
6. Contractors must establish formal career counseling programs which include:
  - attitude development
  - education aid
  - job rotation
  - buddy system or similar program.<sup>15</sup>

The Secretary of Labor has issued a memorandum which requires compliance agencies to follow a standardized evaluation procedure for reviewing contractors under Revised Order No. 4.

Many colleges and universities have been sued for back wages in class action suits in behalf of women faculty members. The compliance agency for Revised Order No. 4 has developed guidelines for the implementation of an affirmative action program.

The Department of Health, Education, and Welfare, the compliance agency for colleges and universities with government contracts, has insisted that they submit a program outlining plans to combat past discrimination against and underutilization of women and minority persons.<sup>16</sup>

The Carnegie Commission on Higher Education made the following recommendation in its report, Opportunities for Women in Higher Education:

Colleges and universities should take especially vigorous steps to overcome a pervasive problem of absence of women in top administrative positions. Women should be given opportunities by their departments to serve as department chairmen because academic administrators are usually selected from among persons who have served ably as department chairmen. Most important is an administrative

<sup>15</sup> Johnson, op. cit., p. 14.

<sup>16</sup> Sinowitz, op. cit.

stance that is highly positive toward providing opportunities for women to rise in the administrative hierarchy.

To date, guidelines have not been released by the HEW compliance agency for public school systems.

School systems that are recipients of Federal contracts have not been asked to submit affirmative action plans to date. They are, however, required to comply with non-discriminatory funding agency rules regarding admission and hiring of women and minorities.

It has been suggested that pressure from educational organizations, women's groups, and women's educational organizations will force such guidelines. Before regulations are defined, public school systems employing 50 or more staff persons and receiving federal funds of \$50,000 or more ought to give serious consideration to voluntary development of affirmative action plans.

The education profession needs to put pressure on HEW to include in its budgetary requests the necessary staffing for compliance review of elementary and secondary school systems which receive Federal contracts. These employers must analyze staff to decide whether women--and minority persons--are being underutilized and to establish goals and timetables for correcting deficiencies.

The development of guidelines for public schools to implement affirmative action plans ought to be pursued speedily.

The lengthy delays that have sometimes characterized HEW procedures, on the one hand, and the prolonged delays that have been involved in the development or implementation of adequate affirmative action plans

Carnegie Proposals on Women in Higher Education," The Chronicle of Higher Education, September 24, 1973, p. 8.

18  
Ibid.

19  
Ibid.

by institutions on the other, are equally unwise and should be avoided in the future.<sup>20</sup>

Without organized efforts to halt discrimination against women educators through pressure for guidelines and plans for their implementation under Executive Order 11375, women will continue to be denied equal access to jobs, pay, promotion, and other opportunities for employment in public education.

#### TITLE IX OF THE EDUCATION AMENDMENTS OF 1972

Title IX of the Education Amendments of 1972 states:

No person in the United States shall, on the basis of sex, be excluded from participating in, be denied the benefits of or be subjected to discrimination under any education program or excluded from actively receiving Federal financial assistance.

This law applies to all public pre-schools, elementary and secondary schools, Vocational Education institutions, undergraduate, graduate, and professional institutions, as well as many private schools. However, training academies for the United States military service and merchant marine are exempted as well as certain religious educational institutions. Those colleges and universities which have an established policy of admitting only one sex also are excluded along with private undergraduate colleges. HEW has compliance control over admissions, programs, assignments, and staff employment practices in institutions included under Title IX. The penalty for non-compliance after proper legal procedures is the cut-off of Federal funds.

Recent guidelines from the U.S. Office of Health, Education, and Welfare prohibit sex-segregated courses, such as homemaking and industrial arts, and public and vocational schools will have until fall 1975 to implement change.<sup>21</sup>

Title IX has potential as a legal weapon against sex discrimination in scholarships and professional schools. Before Title IX, colleges and universities controlled student aid programs. A new Federal scholarship program, the Basic Opportunity Grant, which can provide a needy student with annual stipends up to \$1,400, will be controlled by the U.S. Office of Education.<sup>22</sup>

<sup>20</sup>

Ibid.

<sup>21</sup>

Eileen Shanahan, "H.E.W. Proposes Rules to Outlaw School Sex Bias," The New York Times, June 19, 1974, p. 1.

<sup>22</sup>

Johnson, op. cit., p. 16.

The distribution of athletic "scholarships" has been highly discriminatory. It has been estimated that about 50,000 American men earn a college education through an athletic scholarship compared with fewer than 50 women.<sup>23</sup> In fact, inequality in athletic programs for women has been a main cause for HEW's deferral of Federal funds to several universities submitting inadequate affirmative action plans.

The greater impact of Title IX may be in opening up admissions in professional schools to women. At the present time, women are seriously under-represented. Many more women now are likely to be enrolled in professional schools of nursing, medicine, law, and engineering.

Title IX of the Education Amendments of 1972 has potential for eliminating sex bias in admissions, programs, and staffing patterns in public schools, vocational schools, and higher education. It should help to eradicate sex-segregated classes and policies and practices which deny young women access to male-dominated vocational programs in secondary, post-secondary, and higher education institutions.

#### TITLE VII AND TITLE VIII OF THE PUBLIC HEALTH SERVICE ACT

The Comprehensive Health Manpower Training Act and the Nurse Training Amendments Act of 1971 amended Title VII (section 799A) and Title VIII (section 845) of the Public Health Service Act. The Act prohibits sex-discriminatory admissions practices in federally assisted health training programs. Personnel who work with applicants or students also are protected against sex discrimination in employment.<sup>24</sup>

#### SUMMARY

Several Federal laws and Executive Orders have been passed since 1972 to protect women from discrimination in employment and education. The Equal Pay Act of 1963 prevents sex discrimination in the payment of wages for equal work and in overtime and fringe benefits. Title VII of the Civil Rights Act of 1964 forbids discrimination in public and private companies and educational institutions employing 15 or more workers. The law applies to hiring or firing, wages, fringe benefits, assignment, promotion, working conditions, and employment privileges. The Age Discrimination Act of 1967 prohibits discrimination against the capable older worker by industries in

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"Few Women Aided," The Flint Journal, May 17, 1974, p. C-9.

24

"What is Affirmative Action?" op. cit., p. 11.

interstate commerce and by employment agencies and labor organizations serving such industries. Executive Order 11375, a revision of Executive Order 11246, requires that a government contractor employing 50 persons or more and whose contract totals more than \$50,000 must have a written affirmative action program on file. Title IX of the Education Amendments of 1972 prevents all public and many private educational institutions from discriminating against women in admissions, Federal financial assistance, assignment, and staff employment practices. Recent guidelines from the U.S. Office of Health, Education, and Welfare prohibit sex-segregated courses. Title VII of the Public Health Service Act prevents sex discrimination in admission practices and employment in federally assisted training programs for health personnel.

Thus, female students and employees legally are protected from the kinds of discrimination described in this report. However, greater public awareness of this pervasive problem must be gained if the laws are ever to be strictly enforced. (Appendix A contains a list of federal compliance agencies which have issued affirmative action regulations and guidelines.)

## REFERENCES

"Carnegie Proposals on Women in Higher Education." The Chronicle of Higher Education. September 24, 1973.

Durham, Norman N. "Women in the World of Work: Education's Responsibility." Speech. Regional Seminar/Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

"Dushane Fund Reports." Washington: National Education Association. August 24, 1972.

"Few Women Aided." The Flint Journal. May 17, 1974.

Johnson, Gloria. "Law on Equal Education and Employment Opportunities for Women." Speech. Regional Seminar/Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

Loring, Rosalind and Theodora Wells. Breakthrough: Women into Management. New York: Van Nostrand Reinhold Company. 1972.

Shanahan, Eileen. "H.E.W. Proposes Rules to Outlaw School Sex Bias." The New York Times. June 19, 1974.

Sinowitz, Betty E. "New Legal Remedies for Women." Today's Education. December, 1972.

What is Affirmative Action? Washington: National Education Association. 1973.

Women's Bureau. "Brief Highlights on Major Federal Laws and Orders on Sex Discrimination." Washington: Women's Bureau. Employment Standards Administration, Department of Labor. June, 1973.

# IMPLICATIONS FOR CHANGE IN VOCATIONAL-TECHNICAL EDUCATION

## SUMMARY OF SEXISM IN SCHOOL AND SOCIETY

The years a woman spends in raising children are supposed to fulfill the purpose of her entire life. This is the traditional course that circumscribes women's lives. The biologically-fixed female function of childbearing and rearing serves to limit her opportunities in society, in the world of work, and in education. Men are the bread-winners and women are the homemakers. These are the role models that are repeated by men and women everywhere in our society. But the model is no longer real or appropriate. With women comprising two-fifths of the work force today, they no longer are limited to a single role. Unfortunately, the vision of educators still is clouded with the one-option-world for women, and education exhibits restraint in opening all programs to girls and women.

## The Pyramid of Educational Organization

The educational organization is a pyramid dominated by men. The foundation is composed of a female instructional staff mainly working with youngsters in elementary school. In the junior high school, women teachers decrease in numbers. By senior high school, women teachers are reduced to a minority. The minority is further reduced to 20 percent in higher education, where female full professors are few. Most women administrators are either elementary principals or middle management central office staff. They comprise a minority of junior high school principals, an insignificant number of senior high school principals, and only 0.01 percent of superintendents.

Women on boards of education have occupied one-tenth of the elected slots consistently over the last fifty years. In higher education, female administrators are deans in home economics, library science, or health occupations. The women near the president's office are relative newcomers in powerless slots designed to appease the head counters in the Affirmative Action Office.

## Female Options and Occupational Choices

Girls are treated from early infancy to adulthood as if they were created out of weaker materials and are conditioned at home and at school to be quiet and passive. Unfortunately, the behavioral traits needed for success in our economy are assertiveness and ego strength. While girls are rewarded in the classroom, their future options are restricted. This is most blatant when, in junior high school, girls are assigned to home economics rather than industrial arts, a practice which reinforces the traditional female role. Consequently, girls are denied the opportunity to learn carpentry, woodworking, and simple repair skills and boys are denied the opportunity to learn nutrition, health care, and household tasks.

At the junior high school level, students are introduced to a wide range of occupations through exploratory activities. Nevertheless, most

girls decide to enter homemaking, office, or health programs, as evidenced in secondary vocational enrollments. The fact that girls are clustered in acceptable female occupations suggests that counselors, staff, and parents fail to encourage them to explore other career alternatives.

Vocational Education students in general have a limited awareness of the world of work, because most of their learning occurs in the classroom or shop. Only eight percent of all secondary vocational students were enrolled in cooperative work programs. Distributive education provides cooperative work experience for 24 percent of all enrollees, the highest percentage for any occupational area. Unfortunately, health occupations enroll only five percent, gainful home economics enrolls six percent, and office enrolls only four percent in cooperative programs.

Girls who drop out or graduate from high school without a skill have very limited alternatives: an entry job with low pay, economic dependence, or continued education. Many female vocational students who graduate with saleable skills are almost as limited. If they seek better paying jobs, they must turn to industry. However, the unions have perpetuated employment standards that not only have "protected" women, but also have restricted many of them from employment. Unions, like management, tend to be male strongholds, and they are not likely to be concerned about increasing employment opportunities for women, especially if it may result in reducing employment opportunities for men. If they choose post-secondary education, they will find other young women concentrated in the technical training programs of shortest duration or in health and office occupations.

The more education women complete, the better their earning power and promotional opportunities. Yet, women in colleges and universities are concentrated in education—a field in which the numbers of jobs are decreasing. Women dominate bachelor's and master's programs in education but have a majority of doctorates only in home economics. Even in female strongholds of potential employment, few women seek higher degrees.

Our society has a narrow view of appropriate jobs for women. Moreover, the jobs pursued by the majority of women are held in low esteem. School programs continue to limit girls' awareness of a wide range of employment opportunities, even though many women must either support themselves and their families or be supported by welfare.

The schools limit girls' career choices by using sexist textbooks and curricula materials, counseling girls to enter traditional occupations,

1  
Arthur M. Lee and Robert Sartin, Learning a Living Across the Nation, Project Baseline, Second National Report, Vol. 2, Flagstaff: Northern Arizona University, November 1973, pp. 5 and 79.

and restricting the number of female role models in power positions. Vocational-Technical Education is segregated from junior high school through post-secondary education. The statistics are not likely to change soon, because women are not in decision-making roles in significant numbers either on State or National advisory or policy boards. The world of work is a man's world and will be for some time to come, unless there is change.

#### NEEDED CHANGES

##### Societal Change

Pressure for societal change must emanate from organized efforts. Women's pressure groups like the National Organization for Women (NOW) have been very successful in pressing for equal opportunities for women in employment and education. Civil rights staff have expressed amazement at the speed with which the Equal Rights Amendment and the issue of equal rights for women in general have gained social recognition. The first public demonstrations took place in 1968, and class action suits against major universities and corporations have resulted in the payment of millions of dollars in back pay due women employees who suffered the injustice of sex discrimination.

The primary influence for change in our society is the media, bringing instant worldwide news into millions of homes. Yet, discrimination against women is pervasive in television programming, advertising, and newscasting. More women on the screen and behind the scenes--cinematographers, editors, lighting and sound technicians--can contribute to greater equality. The whole field of radio and telecommunications could provide dramatic opportunities to women with vocational-technical skills. Journalism has been a relatively open field for women. However, there are few women involved in photography, graphics, or printing. Because newspapers and magazines continue to be a major influence on public opinion, women need to learn to use the media for social change.

Women's groups must continue to initiate research, gather statistics, document the facts, develop political skills, initiate law suits, and implement needed programs in an effort to open up a multi-option world for women. Women in the unions, especially the new Coalition for Labor Union Women, can make a decided impact on women's income by working to open up higher paying industrial occupations to women. The numbers of women in apprenticeship programs are few because male unionists have excluded them. If women are to improve their earning power, they must break out of low-paying jobs and enter the skilled trades and crafts.

##### Enforcing the Law

New HEW guidelines for enforcement of Title IX of the Education Amendments of 1972 have been released. The importance of these guidelines as potential tools to resolve issues raised by this report is great. Segregated classes are illegal, and schools have one year to integrate classes, except for units on sex education. In Vocational Education homemaking will have to broaden its appeal to secure voluntary male enrollments. State requirements for specific performance competencies in home economics and con-

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sumer education would hasten an increase in male enrollments in those courses. All vocational-technical programs will have to give evidence of increasing numbers of enrollees of both sexes. This should result in opening up the skilled crafts and operatives occupations and sciences and engineering technologies to women.

An alternative to desegregation of single programs is the combination of complementary female/male courses taught by teams of female/male teachers. Where good reason exists to broaden the content of the vocational program, this may prove to be not only the simpler process, but also may enrich learning. Junior high schools which have integrated gym classes and combined home economics and industrial arts have reported good results. Teachers have improved the relevance of program content, and "mixed" classes have sparked the interest of female and male students.

Title IX also supports similar spending on programs for both sexes. The discrepancies in expenditures between female- and male-dominated Vocational-Technical Education programs probably result from the higher expense involved in skill and technical training and the smaller class size in male-intensive courses. More equitable spending will reduce the student/teacher ratio in predominantly female programs, improve the quality of instruction, and upgrade the curriculum.

Title IX also will equalize opportunities for scholarships and admission, thus encouraging more women to seek education beyond high school.

Executive Order 11375 will continue to serve as the legal tool for increased representation of women among the ranks of instructional staff and administrators in higher education. The same principle should apply to the vocational schools and area skill centers.

Women's groups must continuously review local public school employment statistics and pressure for the implementation of affirmative action plans for women and minorities at the secondary level. HEW must issue workable guidelines on the employment of women in Vocational Education based on Executive Order 11375. Women themselves, especially women educators, may have to organize pressure groups in order to achieve the release of needed guidelines.

#### Educational Administration

Obstacles to equality for women start at the bottom of the educational pyramid, elementary school, where the majority of women teachers and administrators are concentrated. Solutions must originate at the top, in university departments of school administration, which bear the responsibility for preparing greater numbers of women for decision-making positions. Until female administrators increase throughout all levels of the school system, there will be few significant changes for young women in general and Vocational-Technical Education.

Universities must hire administrators to serve as models for aspiring women teachers. In addition, women must be hired to teach administration and those vocational-technical courses with largely male en-

rollments. Female enrollments in doctoral programs of administration must be expanded; in 1970-71, 875 doctoral degrees were conferred on men and only 82 upon women. In fact, women must be recruited into all male-intensive vocational graduate programs in order to increase the supply of females qualified to serve as vocational administrators, as professors of Vocational Education, and as staff of post-secondary technical institutes and community colleges. The current paucity of female administrators will remain until universities demonstrate by their admissions, employment, and promotion policies that they support the advancement of women. Female candidates should be encouraged to enroll at such universities, complete graduate requirements, and apply for jobs in influential administrative posts.

The power figure in public education is usually the superintendent. Significant numbers of women must be trained and hired as superintendents of schools. Once there is a larger pool of qualified women with doctorates in administration, more women should be employed either as principals or as executive staff in central administration in order to acquire knowledge and experience for the superintendency. Such appointments probably would require increasing numbers of women on policy boards that employ the administrative staff of the schools.

#### The Policy Makers

The paucity of women in administration, from universities to local public schools, corresponds to the paucity of females in State leadership positions. Vocational-Technical Education is a power base for male educators, despite the fact that the majority of enrollments are female. Unless strong action is taken, power will remain with men. Only one of fifty chief State school officers is a woman. There are no women State directors of Vocational Education. There are two female executive directors among the State advisory councils. Six of the chairpersons are female. And only 14 percent of the members of all State advisory councils are women.

The U.S. Office of Education has an obligation to enforce Title IX by issuing guidelines requiring equal representation on all policy boards. Presently, the National Advisory Council on Vocational Education has four women on a 22-member board.

Thirty-nine percent of the EPDA interns were women, much to the credit of the program. However, there were no female project directors, and only 17 of the 107 members of the advisory committee were women. If a similar program is instituted again, half of the project directors ought to be women. Their concern probably would equalize internships, thus qualifying greater numbers of women for leadership roles.

#### Teacher Education

Departments of curriculum within colleges of education must prepare future developers to desegregate the curriculum, feminized in elementary school and masculinized in secondary school. Male and female teachers need to be trained to eliminate sexism, which is harmful to male and female alike and destructive to their individual growth and development. Twenty-five percent of the doctorates in curriculum and instruction in

1970-71 were granted to women, a considerable improvement over educational administration, but still insubstantial. In 1970-71, of the 287 doctorates granted in Vocational-Technical Education areas, 30 percent were conferred on women. Twenty-seven were granted in home economics education. Women must be encouraged to seek higher degrees, especially in nontraditional fields of instruction.

#### Inservice Education

Staff who prepare future educators are in need of retraining to create awareness of sexism in schools, society, and employment. Inadequate programs of teacher preparation perpetuate the status quo both in public schools and in universities. Teachers tend to teach as they were taught, contributing to the continuation of outmoded instruction which has little relevance to the world of work and contemporary life. While Federal funds have prompted some inservice training programs for public school staff, little organized effort has been undertaken to retrain teacher educators.

Vastly expanded programs of continuing inservice training are needed to change impractical content and methods which "turn off" students, encourage boys to drop out, and discourage girls from seeking employment in jobs other than office work, health, and teaching. An annual, daylong, inservice program cannot stimulate behavioral change. Educators must be sufficiently motivated to want to change their teaching methods and techniques. They need to see themselves as students see them. Video-taping can expand self-perception and provide the opportunity to try out new forms of teaching behavior. Continuous reinforcement from inservice consultants and teacher-partners in the retraining process promise to fill teachers' needs for lifelong learning experiences and growth. Inservice training is expensive, but poorly educated men and women who cannot survive in the economic mainstream because they lack the job skills to support themselves are an even greater expense.

#### Counselors

Perhaps more than other educators, counselors have received a barrage of complaints from a dissatisfied public, first from minorities and then from women. However, counselors continue to have an academic orientation and demonstrate greater knowledge about higher education than the many occupations available in the world of work. Counselors need ongoing inservice training to increase their scope. Practical work experience also would be helpful to improve their awareness of job requirements and new career opportunities.

Counselors especially should encourage female students to explore those emerging fields which have not been labeled as male or female occupations. Market research, computer programming, systems analysis, and urban planning are all relatively new fields with projected annual openings

• ranging from 750 jobs in urban planning to 34,700 in programming.<sup>2</sup> The largest growth is expected in professional and technical occupations, with an estimated increase of 39 percent. Girls should be advised, on the basis of interest and aptitude, to explore those fields in which women are under-represented: drafting, engineering, and science technologies<sup>3</sup> and the skilled trades and services, including plumbing and pipefitting.<sup>4</sup>

Counselors ought to do more than counsel students about academic and occupational goals. They also must be prepared to help students with personal problems when such help is sought. Counselors are in a central position to establish direct working relationships with social agencies, to refer students to such agencies, and to follow up referrals to determine whether student problems were resolved. Counselors can be helpful to potential dropouts, delinquents, and pregnant teenagers. They may help these students to identify options, arrange for special programs and services, and serve as a liaison between the school, home, psychiatric and drug treatment centers, law enforcement and other social agencies.

#### The Vocational-Technical Education Program

Schools reflect society, but through programs for the world-as-it-was at least a decade ago. Programs designed to meet the priorities of the 1960s are being implemented by the schools of the 1970s. The time lag is diminishing, however, as a result of improved communications. Although it may take several years before traditional programs and practices can respond to today's needs and have an impact on young women, strategies for change must be initiated.

Vocational-Technical Education affords girls limited options in training and, thus, in the world of work. These limits are imposed by society, employers, and unions which close off operative and skilled crafts jobs to women.

Historically, Vocational-Technical Education developed from a 1917 "male-world-of-work model" and "female-world-of-home model," which set the pattern for future enrollments. Most girls have been steered into non-wage-earning homemaking programs for over 50 years. Despite the fact that more women must work today than ever before, girls are being prepared for low-paying, dead-end jobs. Even at the technical level, young women are concentrated in short-term training programs. There is a broader distribution of female enrollments in secondary vocational schools than in post-secondary institutions. In fact, the higher the educational level, the fewer the women.

<sup>2</sup> Women's Bureau, Careers for Women in the 70's, Women's Bureau, Employment Standards Administration, Department of Labor, Washington: U.S. Government Printing Office, 1973, p. 2.

<sup>3</sup> Ibid., pp. 3-4

<sup>4</sup> Ibid., p. 8.

Title IX of the Education Amendments of 1972 should result in major changes in Vocational Education. Because of the rigid patterns of sex-segregated classes, planning ought to begin immediately to enroll young women and men in non-traditional occupations at all educational levels.

#### Home Economics and Consumer Education

Change from the traditional curriculum is imperative in home economics and consumer education. Performance-based competencies must be identified to enable young men and women to survive socially and economically. Knowledge of nutrition and health care, personal money management, and conserving should not be limited to one sex.

With the current emphasis on the quality of life, home and family assume great importance. Too much of education has excluded the social sciences--especially human relations, the development and care of children, responsible parenthood, and the development for more effective living of personal and social values. Family health care and family planning information ought to be included in senior high school classes.

In the age group 18 to 24 years of age, about one out of four young people is already overextended in his (her) credit obligations and for those in this age group who already have some form of installment credit, one out of every three is likely to be overextended.

Despite the availability of television in virtually every home, educators are not taking advantage of the untapped potential of this medium for education. With the development of the home as a learning center for every member of the family, especially those who are homebound, homemaking, parenthood, money management, and employability skills can be taught through TV, cassettes, or programmed materials.

To foster equality in schools and, later, in the home, home economics should be merged with industrial arts and certain trade and industrial courses to provide a more comprehensive program for females and males. Curriculum and methodology and team-teaching approaches will have to be developed. Male vocational teachers have an obligation to change their attitudes toward females in classes. Increasing attention ought to be given to expanding occupational home economics, with career ladders planned for upward mobility affording students greater opportunities in the world of work.

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Mary E. Ryan, An Analysis of Economic and Demographic Characteristics of Consumers Associated with Excessive Installment Debt, Master's Thesis to Graduate School of the University of Minnesota, published by the Federal Reserve Bank of Minneapolis, Minnesota, July, 1968, Tables 4, 3, 31.

### Work Experience and Apprenticeship

With the expansion of community education as a link between home, school, and community, vocational-technical institutions should take fuller advantage of the resources in their localities. The eight percent enrollment in cooperative programs is disturbingly low, especially when the opportunities are available. Most students learn more easily and thoroughly through practical "hands on" experiences. Work experiences opens doors to opportunity for students and creates better employees upon job entry.

Advisory committees for every program in Vocational-Technical Education benefit the schools in many ways, one of which is the establishment of a regular communications link between school and business and industrial representatives who, as potential employers, keep students and educators aware of trends and changes in the local labor market. School staff responsible for job development and placement ought to work closely with advisory committees in improving employment opportunities for women. In fact, half the members should be representative women from the local work force. Just as Vocational Education must qualify more women for nontraditional jobs, they must develop strategies to convince local employers to accept young women for on-the-job training, hire, and promote them.

### Options for Pregnant Teenagers

Programs for pregnant teenagers should be mandated for public schools. State departments of Vocational Education are in a prime role to prevent the needless heavy caseloads of social service agencies responsible for aiding pregnant teenagers and unwed mothers who are unskilled and unemployed. Public schools and vocational schools should expand the options for teenage mothers by keeping them in school, offering special programs in nutrition and child care, career counseling, and intensive occupational training. The pregnant teenager is a prime candidate for career education. She has a greater need for short-term skill development than any other student, because she has two to consider in the immediate future.

Special services for pregnant girls should include prenatal care as well as day care later on. The options of special education programs and adult education programs are desirable alternatives for pregnant girls. Regular consumer and homemaking classes in nutrition, health, and child care also provide skills essential to the well-being of young mothers. But unless job training is provided, offspring of unemployed mothers are likely to become AFDC recipients. Vocational Education is in a position to prevent the hopeless cycle of poverty.

### Day Care

Continuing day care centers with flexible hours are needed for young mothers. An increasing number of businesses and hospitals are providing day care services for their staffs. The possible development of industrially-based day care centers for the children of working parents may become a reality, if women workers pressure for such an arrangement. Possible alternatives to day care include flexible working hours and in-

creased part-time employment for women. Such proposals are being considered by Congress. The only other alternative for mothers without any means of support is welfare.

The world of work is a man's world, but if changes are to come in programs preparing students for the work force, women will have to care enough to lead the way.

Women teachers and the few women in administration and policy positions in Vocational Education are the logical staff to gather the facts and pressure for change on behalf of a fairer, more equitable system. Yet, in view of the legislative mandate that Vocational Education provide a variety of education and training programs for persons of all ages, especially those with special needs--and it is plausible to consider women as a less advantaged, disenfranchised group--all vocational educators who recognize the potential social and economic impact of Vocational Education cannot continue to ignore the needs of half their students.

Once educators eradicate sex stereotyping in the schools, girls and boys will have greater freedom in choosing satisfying careers and life roles. The humanization of our institutions should lead to a society in which women and men may become whole, self-realized persons.

REFERENCES

Lee, Arthur and Robert Sartin. Learning A Living Across The Nation. Project Baseline, Second National Report. Vol. 2. Flagstaff: Northern Arizona University. November, 1973

Mazingo, Sherry. "Women: From Dolls to Degrees--to Disillusion." Speech. Regional Seminar/Workshop on Women in the World of Work. Technical Education Research Centers. October, 1973.

Ryan, Mary E. An Analysis of Economic and Demographic Characteristics of Consumer Associated with Excessive Installment Debt. Master's Thesis to Graduate School of the University of Minnesota. Published by the Federal Reserve Bank of Minneapolis, Minnesota. July, 1968.

Women's Bureau. Careers for Women in the 70's. Women's Bureau. Employment Standards Administration, Department of Labor. Washington: U.S. Government Printing Office, 1973.

Appendix A  
Availability of Regulations and  
Guidelines for Affirmative Action

APPENDIX AAvailability of Regulations and Guidelines  
for Affirmative Action1. Equal Pay Act of 1963

## Contact:

Wage and Hour Division  
Employment Standards Administration  
Department of Labor  
Washington, D.C. 20120

2. Title VI of the Civil Rights Act of 1964

## Contact:

Office for Civil Rights  
Department of Health, Education, and Welfare  
Washington, D.C. 20201

3. Title VII of the Civil Rights Act of 1964

## Contact:

Equal Employment Opportunity Commission  
1800 G Street, N.W.  
Washington, D.C. 20506

4. Executive Order 11246 as amended by 11375

## Contact:

Office of Federal Contract Compliance  
Employment Standards Administration  
Department of Labor  
Washington, D.C. 20210

5. Title IX of the Education Amendment of 1972

## Contact:

Office for Civil Rights  
Department of Health, Education, and Welfare  
Washington, D.C. 20201

6. Title VII and Title VIII of the Public Health  
Service Act

Contact:

Office for Civil Rights  
Department of Health, Education, and Welfare  
Washington, D.C. 20201

What is Affirmative Action? Washington: National Education  
Association. 1973.

U.S. Government Printing Office 1975 - 684-264/10, Region No. 9-1

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## BIOGRAPHICAL SKETCH OF THE AUTHOR

Margaret Steele, Director of Planning and Community Activities for the Charles Stewart Mott Foundation of Flint, was reared in Albion, Michigan, and educated at Albion College where she was a member of Phi Beta Kappa and Alpha Xi Delta. She is married to Tom C. Steele and the mother of Mary Frances, 19, and Charles, 16. She completed her master's degree from the University of Michigan in 1961 and taught and counseled high school students for 16 years at Flint Northern High School. She was awarded both a Mott Fellowship and a Delta Kappa Gamma scholarship to complete requirements for a doctor of philosophy degree from Michigan State University in 1969.

Dr. Steele is a consultant in planning and evaluation and has served on community education evaluation teams in Wilmington, Delaware, 1969 and 1971; Hazel Park, Michigan, 1970; Grand Rapids, Michigan, 1973; Tennessee Valley Authority project with Southern Regional School Boards Association, 1973; as well as Regional Centers for Community Education at Arizona State University, Alma College, Eastern Michigan University and Ball State University.

Dr. Steele is a lecturer and writer in the women's movement. She served as the keynote speaker at the First Women's Caucus, National Education Association, 1971. Publications include "Career Education for Women" in Minorities and Career Education, Laurence Davenport and Reginald Petty, ed., Columbus, Ohio; House of Harnesworth, 1973; "On Women Becoming Education," The Delta Kappa Gamma Bulletin, Spring, 1972; Michigan's Minorities at the Mid-Seventies: Indians, Blacks, Chicanos, Flint, Michigan: Charles Stewart Mott Foundation, 1974, Walter Langs, Jr., co-author; "Women: The Universalizers," Papers in Women's Studies, University of Michigan, Fall, 1974.

Current memberships and offices include AASA; Council of Educational Facility Planners, International, Board of Directors; Delta Kappa Gamma, Co-Chairperson State Affirmative Action Committee, Chairperson, Scholarship Committee; Genesee County Regional Drug Abuse Commission, Chairperson, Planning and Evaluation Committee; Citizens Committee for Comprehensive Health Plan, State of Michigan; NEA; National Community Education Association; Trinity United Methodist Church, Chairperson, Council on Ministries.